```
Similarity
                                                                                                                                                                                                                                                                                                                                   456;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1195
                                                                                                                                                                                                                                                                                                                                                      835
                                                                                                                                                                                                                                                                                                                                                                           605
                                                                                                                                                                                                                                                                                                                                                                                                                                         955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        185
                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 9
AI275105/c
LOCUS
DEFINITION
                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                         Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                         임
                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
               2154
                                                                                                                                                                                                                                                                                                                                                                           2274
                                                                                                                                                                                                                                                                                                                                                                                                                    2334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AN381442
PMO-HT0302-081199-002-g02 HT0302 Homo sapiens cDNA, mRNA sequence.
                                                                                                                                                                                     ;
7
                                                                                                                                                                                                         CAAATTGCTGGGAAACTCTCATGTTA-CTAACTTTGTTGCTCTAACTTCTGCCATCTTGGT 2035
                                                                                                                                                                                                                                                 AATATTTTGTGTTTCTTTTCTCAGGGAATCTAAGGGAAAATTATCAACTGTGCACAAG 2214
                                                                                                                                                                                                                                                                                                                                                                                                                                                             235 TAATGTCTAGGATGAAGAATGCATAGAACATTGTAGTACTTGTAAATAACTAGAAATAA 2394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      383 TITCAGIGGTCCNAAIATACCTCTTCCCTCTGGTTGCCTTTCCTGAGAIAAICCACTAAG 324
                                                                                                                                                                                                                                                                                                                                                  204
                                                                                                                                                                                                                           caaarrecressaaacrercangraccaaacrrrerrecreacreracrescearcrress 444
                                                                                                                                                                                                                                                               203 TCAGAAAGGAGAAACACAGACCAAAGAGAAGTATCTAAGACCAAAGGGATGTGTTTTAT 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

1. (bases 1 to 608)

HCGP http://www.ludwig.org.br/ORESTES.

The FAPESP/LICR Human Cancer Genome Project
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTCAGTGGTCC-AATATTCCTCTTCCCTCTGGTTGCCTTTCCTGAGATAATCCACTAAG
                                                                                                                                                                                                                                                                                                                                                                           2215 GAAAAAATAGATATGTGAAAGGTTCACGTAAATTTCCCTCACATCACAGAAGATTAAAAT
                                                                                                                                                                                                                                                                                                                                                                                              263 GANAAAATAGATATGTGAAAGGTTCACGTAAATTTCCTCACATCACAGAAGATTAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                    TCAGAAAGGAGAAAACACAGACCAAAGAGAAGTATCTAAGACCAAAGGGATGTTTTAT
                                                                                                                                                                                     Gaps
                                                                                                                                                                                    2;
                                                                                                                                                            Score 472.8; DB 9; Length 504;
Pred. No. 6e-81;
0; Mismatches 5; Indels 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGTGAAAAAATTTCTTAT 2477
clone="IMAGE:470583"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   crgrgaaaaaaaaarrrcrrar 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Simpson A.J.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AW381442
AW381442.1 GI:6886101
                                                                                                                                                                 19.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                      Conservative
                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST.
                                                                                                                                                                                     496;
                                                                                                                                                                                                                                                                                                                                                                                                                     2275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2455
                                                                                                                                                                                                                                                  2036
                                                                                                                                                                                                                                                                                           2096
                                                                                                                                                                                                                                                                                                                                    2155
                                                                                                                                                                                                          1977
                                                                                                                                                                                                                                                                                                                                                        323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23
                                                                                                                                                                                                                              503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 8
AW381442/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                            Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                 ે છે
                                                                                                                                                                                                                                                                                                                            B &
                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                 à
```

```
Tel: +55-11-2704922
Fax: +55-11-2700101
Email: saimpsoneDludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=PM0&tL2=PM0-HT0302-081199-002-g02&t23=1999-11-08&t4=1)
Seq prime: puc 18 forward
High quality sequence start: 41
High quality sequence stop: 590.
Location/Qualifiers
1. 608
/ Arganism="Homo sapiens"
/ Mol_type="mRNA"
/ Alone lib="Homo sapiens"
/ Alone lib="Homo sapie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mRNA linear EST 29-JAN-1999
sapiens cDNA clone IMAGE:1877205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGA 1194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATACTICTCCTCTCAGATGATAAAGATCAAAAGAATTCGAAGGGAGTTGGTAAACGC 1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGTGTGGTACATGTGGCTTTTGCTCATGTGGATAGCATGGATTTGATTACAAAAGG 1074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1075 TGACCTTATAGAAATAGAGATGTGAGCCTGTGAGGTCCAAGCTAGAGGAAGTCCAAAG 1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          365 TGACCTTATAGAAATAGAGATGTGAGCTGTGAGGTCCAAGCTAGAGGAAGTCCAAAG 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                545 cccarcecreaaggacagaarrcarrereregegearrrerarreargceagcrerarrea 486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            305 AAACTIGGATITGCICITICIGACAICTIGGIGGITAGCAAITATICCTCTGAGIGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTGGACCCTGTAAAGGATGTTCTAATTCTTTCTGCTCTGAGACGAATGCTATGGGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           245 GCTGGACCCTGTAAAGGATGTTCTATTCTTCTTCTTGTGAGACGAATGCTATGGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      895 CCCATCGCTGAAGGACAGAATTCATTGTGTGGCATTTGTATTTGATGCCAGCTCTATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TACCTTACAGTTTAATCCCATGGAATCAATCAATTAAATCATCATGACTACATTGATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 608;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1255 AGATGACTICTTAGAGGATTTGCCTTTTGAGCAAATAGGTA 1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18.2%; Score 453; DB 10;
ilarity 98.9%; Pred. No. 3.8e-77;
Conservative 0; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AI275105 451 bp
4511.x1 Soares NhHMPu_S1 Homo
3', mRNA sequence.
AI275105
```

us-10-051-835-18.rst

```
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi, Bukaryota, Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

El (Bases I to 1201)

I (Masses I to 1201)

I (Masses I to 1201)

I (Mublished (2001)

On Feb 15, 2001 this sequence version replaced gi:12871741.

Contact: Genoscope

Genoscope - Centre National de Sequencage

BP 191 91006 EVRY cedex - France

Bmail: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr

Library was constructed by Life Technologies, a division of Invitrogen. This sequence belongs to sequence cluster 1009.f For more information about this cluster, see

http://www.genoscope.cns.fr/

Reng.Librar.gi?Req=CSODEOSABIONPI&cluster=1009.f. Contact:

Feng Liang Email: fliang@lifetech.com URL:

Reng Liang Email: fliang@lifetech.com URL:

Location/Qualifiers

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CSODE005YC19"
/clone="The Homo sapiens PLACENTA"
/clone="Vector: PCMYSPORT 6; lst strand cDNA was primed
with a NotI-oligo(dT) primer. Five prime end enriched,
double-strand cDNA was digested with Not I and cloned into
the Not I and ECRNV sites of the pCMVSPORT 6 vector.
Library was not normalized."
                                                                                                                                     1201 bp mRNA linear EST 12-MAY-2003 PLACENTA Homo sapiens cDNA clone CS0DE005YC19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1101 AGCCTGTGAGGTCCAAGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA 1160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCATGTGGATAGCATGGATTTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGTG 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         921 GIGIGGCATTIGIATTTGATGCCAGCTCTATTCAATACTTCTCCTCTCAGATGATAGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGTGGCATTTGTATTTGATGCCAGCTCTATTCAATACTTCTCCTCTCAGATGATAGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              611 AGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   861 CAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              801 AAATATTTTTTGAATTAATATCTTGCTTTATGTCTACCTTACAGTTTAATCCCATGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Match 1201; Local Similarity 90.5%; Pred. No. 3.4e-75; Length 1201; les 448; Conservative 19; Mismatches 28; Indels 0;
    31 CTGTGAAAAATAAATTTCTTATAAAACTC
                                                                                                                                                                                                        AL541045
AL541045.2 GI:30544837
                                                                                                                                        AL541045
AL541045 Homo sapiens E
3-PRIME, mRNA sequence.
                                                                                                                                                                                                                                                 EST.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                          RESULT 10
ALS41045/c
LOCUS
                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"

/mol_type="mRNA"

/mol_type="mRNA"

/db_xref="texan:9606"

/clone="InAGE:187105"

/tissue_type="Pooled human melanocyte, fetal heart, and pregnant uterus"

/lab host="DH108"

/clone lib="Soares NhHMPu_S1"

/note="Organ: mixed (see below); Vector: pT713D-Pac

(Pharmacia) with a modified polylinker; Site_1: Not I;

Site_2: Eco RI; Equal amounts of plasmid DNA from three normalized libraries (melanocyte 2NDHM, pregnant uterus NbHH9U, and fetal heart NbHH9M) were mixed, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 260232-265223,
                                                                                      Eukaryota; Metazoa, Chordata, Craniata; Vertebrata, Euteleostomi, Mammala; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 451)
S NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index
Unpublished (1997)
Contect: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov, Ph.D.
Email: cgapbs-r@mail.nih.gov for further information.
This clone is available royalty-free through LLNL; contact the IMAGE Consortium (Info@image.llnl.gov) for further information.
Seq primer: -40UP from Gibco.
Seq primer: -40UP from Gibco.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITICAGIGGICCAAIATICCTICTICCCTCTGGTTGCCTTTCCTGAGAIAAICCACTAAG 2154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATATTTTGTGTTTTCTTTTCTCAGGGAATCTAAGGGAGGAAATTATCAACTGTGCACAAG 2214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAAAAAATAGATATGTGAAAAGGTTCACGTAAATTTCCTCACATCACAGAAGATTAAAAT 2274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAGAAAGGAGAAAACACAGACCAAAGAGAAAGTATCTAAGACCAAAGGGATGTGTTTAT 2334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAATGTCTAGGATGAAGAATGCATAGAACATTGTAGTACTTGTAAATAACTAGAAATAA 2394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             331 AATATTTTGTGTTTCTTTTTCTCAGGGAATCTAAGGGAGGAATTATCAACTGTGCACAAG 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCAGAAAGGAGAAACACAGACCAAAGAGAAGTATCTAAGACCAAAGGGATGTTTTAT 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               271 GAAAAAAATAGATATGTGAAAAGGTTCACGTAAATTTCCTCACATCACAGAAGATTAAAAT 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           151 TAATGTCTAGGATGAAGAAATGCATAGAACATTGTAGTACTTGTAAATAACTAGAATAA 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 451;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18.1%; Score 450; DB 9; L
100.0%; Pred. No. 1.5e-76;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     340488-345479, and 484488-489479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGTGAAAAATAAATTTCTTATAAACTC 2484
    GI:3897379
                                                  sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 18.1
Best Local Similarity 100.
Matches 450; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                            .451
                                                                       Homo sapiens
    AI275105.1
                                                  Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2035
                                                                  ORGANISM
                                                                                                                                 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                         JOURNAL
COMMENT
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

1040

ô

920

980 672

```
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:1992195"
                                                                                                                                                                                                                                                                                                                                           AAAAATAAATTTCTTATAAAACTC 2484
                                                                                                                                                                                                                                                                                                                                                                           32 AAAAATTTCTTATAAACTC 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AI290106.1 GI:3931772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .436
       2161
                                                                                                                                                                                                                                                                                                                                           2461
                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 12
AI290106/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                              g
                                                                                                                                                         g
                                                               õ
                                                                                                                            ò
                                                                                                                                                                                               ò
                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                               ठे
                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tumor Gene Index

Inpublished (1997)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov

Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.

Email: cgapbs-remail.nih.gov

Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.

Emmert-Buck, M.D., Ph.D.

cDNA Library Preparation: Life Technologies, Inc.

cDNA Library Preparation: Life Technologies, Inc.

cDNA Library Arrayed by: Greg Lennon, Ph.D.

DNA Sequencing by: Washington University Genome Sequencing Center

Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

Seq primer: -40UP from Gibco

High quality sequence stop: 420.
                                                                                                                TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAA 1220
                                                                                                                                                                                                                                                                                                   AW130518 452 bp mRNA linear EST 27-OCT-1999
RESEAGOB XI NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2621679 3',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /tissue_type="poorly differentiated adenocarcinoma with signet ring cell features"
/lab_host="DH101" CAAP Gas4"
/clone_lib="NUIC CAAP Gas4"
/note="Organ: stomach; Vector: pCMV-SPORT6; Site_1: Sal1; Site_2: Not1; Cloned unidirectionally. Primer: Ōligo dr. Average insert size 1.69 kb. Life Technologies catalog #: 11549-011"
393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                392 GIGGICCAAIAITCCICTTCCCTCTGGTTGCCTTTCCTGAGAIAATCCACTAAGAAIAIT 333
                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 452)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2101 GTGGTCCAATATTCCTCTTCCTCTGGTTGCCTTTCCTGAGATAATCCACTAAGAATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 99.5%; Pred. No. 9e-75;
Matches 442; Conservative 0; Mismatches 2; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:2621679"
                                                                                                                                                                                 TTGAGCAAATAGGTA 1295
                                                                                                                                                                                                                                                                                                                                                                         AW130518.1 GI:6132125
                                                                                                                                                                                                                 TTGMGCAAATAGGGA 297
                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .452
                                                                                                                                                                                                                                                                                                                                       mRNA sequence.
AW130518
                                                                                                                                                                                    1281
                                                1161
                                                                                                                   1221
                                                                                                                                                                                                                   311
                  491
                                                                                 431
                                                                                                                                                                                                                                                                    RESULT 11
AW130518/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                        엄
                                                                                                                                       쉽
                                                                                                                                                                                 8
                                             8
                                                                                                                 ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Пp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
```

```
Tunor Gene Index

Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: Gapbs-rémail.nih.gov
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.
Email: Gapbs-rémail.nih.gov
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.
Email: Buck, M.D., Ph.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LiML at:
Nww-bio.llnl.gov/bbrp/image/image.html
Insert Length: 765 Std Error: 0.00
Seg primer: -40UP from Gibco
High quality sequence stop: 405.
                                                                                                 2280
                                                                                                                                                                                                                                    2340
                                                                                                                                                                                                                                                                                                                                                                           2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        436 bp mRNA linear EST 21-DEC-1998 qw26602.x1 NCI_CGAP_Ut4 Homo sapiens cDNA clone IMAGE:1992195 3', AI290106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2401 TTAGTCATAATTGTGAAAAATAATAATTTTTTTTTTGGATTTATGTTCTGTATCTGTG 2460
332 TTGTGTTTCTTTTCTCAGGGAATCTAAGGGAGGAAATTATCAACTGTGCACAAGAAAAA 273
                                                                                                                                                                                                                                                                                                        212 AGAAGAAACACAGACCAAAGAGAAGTATCTAAGACCAAAGGGATGTGTTTTATTAATGT 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone lib="NCI_CGAP_Ut4"
/note="Organ: uterus; Vector: pCNV-SPORT6; Site_1: Sall;
Site_2: Not1; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.48 kb. Life Technologies catalog #:
                                                                                                                                                                                                                                                                                                                                                                                                                    152 CTAGGATGAAATGCATAGAACATTGTAGTACTTGTAAATAACTAGAAATAACATGAT 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 4356) NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap. NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap. National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue_type="serous papillary carcinoma, high grade, 2 pooled tumors" /lab_host="DH10B"
                                                                                             272 AATAGATATGTGAAAGGTTCACGTAAATTTCCTCACATCACAGAAGATTAAATTTCAGAA
                                                                                                                                                                                                                                    2281 AGGAGAAAACACAAAGAGAAGTATCTAAGACCAAAGGGATGTGTTTTATTAATGT
                                                                                                                                                                                                                                                                                                                                                                           2341 CTAGGATGAAGAAATGCATAGAACATTGTAGTACTTGTAAATAACTAGAAATAACATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92 Tragrcaraarrergaaaaraaraaraarrarrrrrrrrrggarrrargrrcrgrarcrerga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 436; DB 9; Length 436; Pred. No. 7.6e-74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17.6%; S
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
```

us-10-051-835-18.rst

```
2136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 14
CA411843/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6 6 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  줨
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               462 bp mRNA linear EST 10-JAN-1996 JY35c11.81 Soares melanocyte 2NbHM Homo sapiens cDNA clone IMAGE:273236 3', mRNA sequence.
N33172
R33172.1 GI:1153571
                                             2108
                                                                                                                                    2168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2229 TGTGAAAGGTTCACGTAAATTTCCTCACATCACAGAAAATTAAAATTCAGAAAAA 2288
                                                                                                                                                                                                                           2289 ACACAGACCAAAGAGAAGTATCTAAGACCAAAGGGATGTGTTTTTATTAATGTCTAGGATG 2348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2349 AAGAAATGCATAGAACATTGTAGTACTTGTAAATAACTAGAAATAACATGATTTAGTCAT 2408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wiscon, Washington, Marchelou, N., Milliamson, P., Milson, R. The WashU-Wisck EST Project

I Unpublished (1995)
Contact: Wilson RK
Washington University School of Medicine
4444 Forest Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1810
Fax: 
    ö
                                                                                                                                                                                317
                                                                                                                                                                                                                                                                         257
                                                                                                                                                                                                                                                                                                                                                                                                                                    196 ACACAGACCAAAGAGAAGTATCTAAGACCAAAGGGATGTGTTTTTATTAATGTTGTGTG 137
                                                                                                                                                                                                                                                                                                                                                              256 TGTGAAAGGTTCACGTAAATTTCCTCACATCACAGAAGTTAAAATTCAGAAAGGAGAAA 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates; Catarrhini, Hominidae, Homo.
1 (Dases 1 to 462)
Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M.,
Holman,M., Kucaba,T., Le,M., Lennon,G., Marra,M.,
Parsons,J., Rifkin,L., Rohlfing,T., Soares,M., Tan,F.,
Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and
                                                                                                                                                            376 ATAITCTCTTTCCCTCTGGTTGCCTTTCCTGAGATAATCCACTAAGAATATTTTGTGTTT
                                                                                                                                                                                                                                                        136 AAGAAATGCATAGAACATTGTAGTACTTGTAAATAACTAGAAATAACATGATTTAGTCAT
                                                                                    436 crcriccrcargeracererectearararrageerresearrarcaereca
                                                                                                                                  2109 ATAITCCICITCCCCTCTGGTTGCCTTTCCTGAGATAATCCACTAAGAATAITIGIGITT
    Gaps
    ö
    Indels
    ö
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="GDB:3882878"
/db_xref="taxon:9606"
  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2469 ATTICTTATAAAACTC 2484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16 ATTCTTATAAACTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Homo sapiens
Matches 436; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 13
N33172/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                             8 8
                                                                                                                        ò
                                                                                                                                                                    g
                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                        g &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

```
2135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CA411843

T63 bp mRNA linear EST 07-NOV-2002
UI-H-EZO-bak-o-13-0-UI.81 NCI CGAP Ch1 Homo sapiens cDNA clone
UI-H-EZO-bak-o-13-0-UI 3', mRNA sequence.
CA411843.1 GI:24774494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2435
                                                                                                                                                                                                                                                                                                                                                      'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2316 CCAAAGGGATGTGTTTTATTAATGTCTAGGATGAAGAAATGCATAGAACATTGTAGTACT 2375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 103
                                                                                                                                                                                                                                                                                                                                                                                       343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
Homo sapiens
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 763)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      282 ATTATCAACTGTGCACAAGGAAAAAATAGATATGTGAAAGGTTCACGTAAATTTCCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       162 CCAAAGGGATGTGTTTTATTAATGTCTAGGATGAAGAAATGCATAGAACATTGTAGTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATCACAGAAGATTAAAATTCAGAAAGGAGAAAACACAGACCAAAGAGAAGTATCTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2077 TATTAGCGTTGGTTGAGATTTT-CAGTGGTCCAATATTCCTCTTCCCTCTGGTTGCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              102 тетьаатьастадьаатаасатеатттастсатааттетсадададатьатваттттт
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     402 TATTAGGGTTGGTTGAGATTTTCCAGTGGTCCAATATTCCTTTCCTCTTGGTTGCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTATCAACTGTGCACAAGGAAAAAAAAAAAATAGATATGTGAAAAGGTTCACGTAAATTTCCTCA
                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                    5;
                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 99.1%; Pred. No. 1.3e-73;
Matches 458; Conservative, 0; Mismatches 2; Indels 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2436 TIGGATITAIGITCIGIAICTIGIGAAAAAATAAATITCTIAI 2477
42 TIGGATITAIGITCIGIAACIGIGAAAAAATAAATITCITAI 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tumor Gene Index
Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
clone="IMAGE:273236"
                 'sex="Male'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              222
```

```
/tissue type="Chondrosarcoma Grade II"
/dev stage="Adult"
/lab_host="Adult"
/lab_host="Adult"
/clone lib="NCI CGAP Chi"
/clone lib="NCI CGAP Chi"
/hore="Organ: Left Pelvis; Vector: pT7T3-Pac (Pharmacia)
/hore="Organ: Left Pelvis; Vector: pT7T3-Pac (Pharmacia)
with a modified polylinker; Site I: EcoR I; Site 2: Not I;
NCI CGAP Chi is a cDNA library containing the following
tissue(B; Chondrosarcoma Grade II: The library was
constructed according to Bonaldo, Lennon and Soares,
Genome Research, 6:791-806, 1996. First strand cDNA
synthesis was primed with an oligo-dT primer containing a
Not I site. Double stranded cDNA was ligated to an EcoR I
adaptor, digested with Not I, and cloned directionally
into pT7T3-Pac vector. The oligonucleotide used to prime
the synthesis of first-strand cDNA contains a library tag
sequence that is located between the Not I site and the
modernorecon.

### CAN CONTAIN CONTAINS AND CONTAINS AND CONTAINS TAIL The Sequence tag for this library is
                  Orthoapedics
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa DNA Sequencing by: Dr. M. Bento Soares, University of Iowa Clone Distribution: Clone distribution information can be obtained from Dr. M. Bento Soares, bento-soares@ulowa.edu
POLYA-Yes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGCCTGTGAGGTCCAAGCTAGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGAC 1159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1160 ATCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTA 1219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTCTTTCTGCTCTGAGACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCT 1279
Tissue Procurement: Dr. Steven Gitelis/ Rush Presbiterian, Dept. of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           920 TGTGTGGCATTTGTATTTGATGCCAGCTCTATTCAATACTTCTCCTCTCAGATGATAGTA 979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  763 TCAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGCCTGTGAGCTCCAAGCTAGAGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             860 TCAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 980 AAGAICAAAAGAATICGAAGGGAGTIGGIAAACGCIGGIGGIACAIGIGGCITIGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           643 AAGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGGTGCTACATGTGGCTTTGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1040 ACTCATGTGGATAGCATGGATTTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tch al Similarity 99.5%; Pred. No. 2.2e-73; 434; Conservative 0; Mismatches 2; Indels 0;
                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/db_xref="ttaxon:9606"
/dlone="UI-H-EZO-bak-o-13-0-UI"
/tissue_type="Chondrosarcoma Grade II"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGATCACGCT.
TAG_TISSUE=grade-2-chondrosarcoma
                                                                                                                                                                                                                      Location/Qualifiers
1. .763
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TAG SEQ = ATCTAATATG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAG_LIB=UI-H-EZ0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTGAGCAAATAGGTA 1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTGAGCAAATAGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S:
Matches 434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           343
                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
```

```
Email: est@wateon.wustl.edu
This clone is available royalty-free through LLNL ; contact the
This clone is available royalty-free through LLNL ; contact the
INAGE Consortium (info@image.llnl.gov) for further information.
Insert length: 670 Std Error: 0.00
Seq primer: -28M13 rev2 from Amersham
High quality sequence stop: 351.

I. 512

/ Ovariaism="Homo sapiens"
//mol type="mRNA"
//db_xref="GDB:3756585"
//db_xref="GDB:3756585"
//clone="INAGE:470583"
//sex="female"
//sex="female"
                                           AA032029

ZKI5b08.rl Soares pregnant_uterus_NbHPU Homo sapiens cDNA clone
IMAGE:470583 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1923 TAGTGCTTGGGAAATCAATTCAGAATATCACATCCTCTCCAATTCTCTTTACTCAAATT 1982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 GCTGGGAAACTCTCATGTTACTAACTTTGTTGCTCTAACTCTGCCATCTTGGTTTCCCCA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not and Eco RI sites of the modified pT7T3 vector. Library went through one round of normalization. Library constructed by M. Fatima Bonaldo."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                       Eukaryoča; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 512)
                                                                                                                                                                                                                                                                                                1 (bases 1 to 512)
Hillier, L. Lennon, G. Becker, M., Bonaldo, M.F., Chiapelli, B.,
Chispoe, S., Dietrich, M., DuBuque, T., Favello, A., Gish, W.,
Hawkins, M., Hultman, M., Kucaba, T., Lacy, M., Le, M., Le, N.,
Bandis, E., Moore, B., Morris, M., Parsons, J., Prange, C., Rikin, L.,
Rohliing, T., Schellenber, Soares, M.B., Tan, F., Thierry Meg, J.,
Trevaskis, E., Underwood, K., Wohldmann, P., Waterston, R., Wilson, R.,
and Marra, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Generation and analysis of 280,000 human expressed sequence tags
Genome Res. 6 (9), 807-828 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 TAGTGCTTGGGAAATCAATTCAGAATATCACATCCTCTCCAATTCTCTCTTACTCAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1983 GCTGGGAAACTCTGAIGTTACTAACTTTGTTGCTCTAACTCTGGCGTCTTGGTTTCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 512;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
17.4%; Score 431; DB 9; Length 51:
Best Local Similarity 97.2%; Pred. No. 6.8e-73;
Matches 489; Conservative 0; Mismatches 9; Indels
                                                                                                                                                  AA032029.1 GI:1501992
                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                          Homo sapiens
RESULT 15
AA032029
LOCUS
DEFINITION
                                                                                                                                                VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ਨੇ
```

Search completed: April 26, 2004, 01:59:38 Job time : 4512.01 secs

```
US-09-566-921-125
; Sequence 125, Application US/09566921
; Patent No. 6662888
; GENERAL INFORMATION:
; APPLICANT: Loring, Jeanne F.
; APPLICANT: Tingley, Debora W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-397-787-62
                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 2
                          00000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 62, Appl Sequence 125, Appl Sequence 127, Appl Sequence 13, Appl Sequence 37, Appl Sequence 32, Appl Sequence 32, Appl Sequence 8, Appl Sequence 8, Appl Sequence 11, Appl Sequence 11, Appl Sequence 52, Appl Sequence 22, Appl Sequence 25, Appl Sequence 25,
                                                                                                                        April 25, 2004, 07:15:18 ; Search time 123.228 Seconds (without alignments) 11186.557 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                   1: /cgn2_6/prodata/2/ina/5A_COWB.seq:*
2: /cgn2_6/prodata/2/ina/5B_COWB.seq:*
3: /cgn2_6/prodata/2/ina/6A_COWB.seq:*
5: /cgn2_6/prodata/2/ina/6B_COWB.seq:*
5: /cgn2_6/prodata/2/ina/PCTUG_COMB.seq:*
6: /cgn2_6/prodata/2/ina/PCTUG_COMB.seq:*
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-397-787-62
US-09-56-211125
US-09-56-221-125
US-09-385-982-122
US-09-801-861-33
US-09-801-198-37
US-09-801-198-37
US-08-107-755A-32
US-08-107-755A-8
US-09-107-755A-8
US-09-107-755A-8
US-09-107-755A-8
US-09-107-755A-8
US-09-107-755A-8
US-09-107-755A-8
US-09-107-755A-8
US-09-107-755A-8
US-09-621-14
US-09-621-14
US-10-204-708-52
US-09-621-976-2813
US-09-621-976-2813
US-09-621-976-2813
US-09-621-976-2813
US-09-621-976-2813
US-09-621-976-2813
                                                                                                                                                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                 682709 segs, 277475446 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                    nucleic search, using sw model
                                                                                                                                                                                                                                                                                                              IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patents_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                        US-10-051-835-18
2484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query
Match 1
                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                        Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             42.8
                                                                                      OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                 Searched:
                                                                                                                                                                                                                                                                        Sequence:
                                                                                                                                 Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Resul
```

```
1512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                             Sequence 595, Apple Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 3, Appli Sequence 53, Appli Sequence 57, Apple Sequence 77, Appli Sequence 28, Appli Sequence 228, Appli Sequence 228, Appli Sequence 228, Appli Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 TIGCCATTTCCCTCTTTTCCTGGAGTTCATACTAGAGAATCTGGACTATGTTTTTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1513 TTGTCTTGAGAAGITTTAAAATAATCCACCTCTGTCATTTCCACTCTGAACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 TIGITITIGAGATGAAAGTTTTAAAAATAATCCACCTCTGTCATTTCCACTCTCTGAACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181 CCAAGCTGTATCCCTGGCCTCTTTTCTCAGACTATGTTTTCTTTACTTGGGACCTAGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1453 TIGCALITICCCICITITICCIGGAGIICATACIAGAGAAICIGCACIAIGITITICCCTIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1573 CCAAGCTGTATCCTGGCCTCTTTTCTCAGACTATGTTTCTTTACTTGGGACCTAGAACT
                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1393 GITGITGCCCTGTGATTAGTICTGCTTTTTAACCCACTCCCTGGATGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 240;
                                                                                                                                                                                                                                                                                                                                                                            RESULT 1
US-09-197-787-62

Sequence 62, Application US/09397787

Sequence 62, Application US/09397787

Sequence 62, Application US/09397787

GENERAL INFORMATION:
APPLICANT: Benson, Darin R.
APPLICANT: Lodes, Michael J.
APPLICANT: Mitcham, Jennifer L.
APPLICANT: King, Gordon E.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR OVARIAN
TITLE OF INVENTION: CANCER THERAPY AND DIAGNOSIS
FILE REFERENCE: 210121.4662.
CURRENT APPLICANTON NUMBER: US/09/397,787

CURRENT FILING DATE: 1999-09-16

NUMBER OF SEQ ID NOS: 334

SEQ ID NOS: 334

SEQ ID NOS COMPANIANE FABLESEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9.7%; Score 240; DB 4; I
100.0%; Pred. No. 7.8e-49;
iive 0; Mismatches 0;
US-10-204-708-8
US-08-99-91-10
US-08-998-416-55
US-10-204-708-60
US-08-446-6554-1
US-09-150-741-1
US-09-150-741-1
US-09-881-3
US-10-284-869-3
US-10-204-708-77
US-10-204-708-77
US-10-204-708-77
US-10-204-708-77
US-10-204-708-77
US-10-204-708-77
US-10-204-708-28
US-08-998-416-224
US-08-998-416-224
US-08-790-981-1
                                                                                                                                                                                                                                                                                                                              ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 100. Matches 240; Conservative
                                   658
6156
8920
8920
1667
148567
148567
396
6182
10467
11131
640681
                     64068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 240
TYPE: DNA
ORGANISM: Homo sapien
```

```
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/232,463
                                                                                                                                          FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION 1435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/935,313
FILING DATE:
APPLICATION NUMBER: EP 91 114 300.6
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 30472/114 IMMU
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEX: 899149
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 7218 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1152 CACAAAGAAGTATTAAACTGTGGTATAGCATATGTGGCCTTGCTTACTAAAGTGGATGAT 1211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1392 AGGCAGATGCTGCGGGGCTGCAGATGATTTTTTTAGAAGATTTGCCTCTTGAGGAAACTGGT 1451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      972 TTAAAAGGTTGTATGCCAGACAGATATCAGTTTAATTCCCGTAAACCAATTACACCTGAG 1031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1212 TGCAGTGAGGTTCTTCAAGACAACTTTTTAAACATGAGTAGATCTATGACTTCTCAAAGC 1271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1032 CATTCTACTTTTATCACCTCTCTCTCTGAAGGACAGGATTCACTGTGTGGCTTATGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1115 AAGCTAGAGGAAGTCCAAAGAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1272 CGGGTCATGAATGTCCATAAAATGCTAGGCATTCCTATTTTCCAATATTTTGATGGTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             935 TITGATGCCAGCTCTATTCAATACTTCTCCTCTCAGATGATAGTAAAGATCAAAAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1055 ATGGATTTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGTGAGCCTGTGAGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1235 AGACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTGAGCAAATAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               875 CATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATTGTGTGGCATTTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1092 Tradacarcaacrcraficacaarcrcracicraaaargriggcaaagr
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                                                                                                                                              Length 2494;
APPLICANT: Edwards, Carla M.
TITLE OF INVENTION: GRENES EXPRESSED IN ALZHEIMER'S DISEASE
FILE REFERENCE: PA-0024 US
CURRENT APPLICATION NUMBER: US/09/566,921
CURRENT FILING DATE: 2000-05-05
NUMBER OF SEQ ID NOS: 138
SOFTWARE: PERL PROGRAM
                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 7.9%; Score 196.8; DB 4; Length; Best Local Similarity 63.1%; Pred. No. 4.6e-38; Matches 303; Conservative 0; Mismatches 177; Indels
                                                                                                                                                                                                                                                   NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. 6682888 431588.3
                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: a, t, c, g, or other US-09-566-921-125
                                                                                                                                                                                                                                                                                                NAME/KEY: unsure
LOCATION: 2018-2291, 2487
                                                                                                                                                                                            TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                 SEQ ID NO 125
LENGTH: 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

(703)836-9300 (703) 683-4109

```
1434 TGGATGCATTTTTCCCTCCTTGCATTTCCCTCTTTTCCTGGAGTTCATACTAGAGAATCT 1493
                                                                                                                                                                                                                                              TITCCACTCTCTGAACATCCCAAGCTGTATCCCTGGCCTCTTTTCTCAGACTATGTTTCT 1613
                                                                                                                                                                                                                                                                                                                                               TTACTTGGGACCTAGAACTGGATTGGATTGGCATTGCTCCTGATCAGATGAGACCTTTGA 1673
                                                                                                                                                                                                                                                                                                                                                                    1484 AGTGATGCCTACATGCCGTTTTTTTGAAACTGAATAGATGCGTCTAGAAGCGATGCTACGC 1543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1854 AGTACATGCTGCTCTGTTCCATTTAGAGATTTGACAGAGGTTTCAGTTTAGTATACTCAA 1913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1424 YYYYYYYYYYGTACCAAATICTICTATCTTTAACTACTIGCATAGATAGGTAATTAC
                                                                                                       1374 GCTCTCTGTCTTTTTGTGGGTTGTTGCCCTGTGATTAGTTCTGCTTTTTAACCCACTCCC
                                                                                                                                                                                  1494 GCACTATGTTTTTCCCTTTTTGTCTTGAGATGAAAGTTTTAAAATAATAATCCACCTCTGTCA
                                                                                                                                                                                                                                                                                                      Gaps
                                                                          ô
                                             Length 7218;
                                         ch
1 Similarity 14.4%; Pred. No. 2.8e-12;
81; Conservative 249; Mismatches 233; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1914 ATCTTATTTTAGTGCTTGGGAAA 1936
, CLONE: pTZgpt-Fls
US-08-232-463-14
                                                                                                                                                                                                                                                                                        1554
                                                                                                                                                                                                                                                                                                                                                  1614
                                                                                                                                                                                                                                                                                                                                                                                                            1674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1734
                                              Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뎏
                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
```

FOWLPOX VIRUS

GENERAL INFORMATION:
APPLICANT: DORNER, F.
APPLICANT: SCHEIFLINGER, F.
APPLICANT: FALKNER, F. G.
TITLE OF INVENTION: RECOMBINANT FOI VIMER OF SEQUENCES: 52
CORRESPONDENCES: ADDRESS: ADDRESSEE: FOLEY & LARTHER

Sequence 14, Application US/08232463 Patent No. 5670367

Foley & Lardner 1800 Diagonal Road, Suite 500

Alexandria

STREET:

22313-0299

ന

```
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ු සි
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               심
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 49, Application US/10204708

Patent No. 6677731

GENERAL INRORANTION:

APPLICANT: PIEPENBROCK, Christian
APPLICANT: Diagnosis of Diseases Associated with DNA Replication
ITILE OF INVENTION: Dy Assessing DNA Methylation
FILE OF INVENTION: Dy Assessing DNA Methylation
CURRENT PELING DATE: 2001-04-06
PRIOR APPLICATION NUMBER: DE 10019058.8
PRIOR APPLICATION NUMBER: DE 10019173.8
PRIOR PELING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: DE 10019173.8
PRIOR PELING DATE: 2000-04-07
PRIOR FILING DATE: 2000-06-07
PRIOR FILING DATE: 2000-06-07
PRIOR FILING DATE: 2000-06-07
PRIOR FILING DATE: 2000-06-07
PRIOR FILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 98
SEQ ID NO 49
PRIOR FILING DATE: 2000-09-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>ښ</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        904 GAA--GGACAGAATTCATTGTGTGGCATTTGTATTTGAT-GCCAGCTCTATTCAATACTT 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        845 TITAATCCCATGGAATC-AATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 2.2%; Score 53.6; DB 3; Length 551; Best Local Similarity 80.0%; Pred. No. 0.00098; Matches 96; Conservative 0; Mismatches 20; Indels
                                                                                                                                                                                                               GENERAL INCORRATION:
GENERAL INCORRATION:
APPLICANT: ENDEGE, WILSON O., ET AL.
TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION
TITLE OF INVENTION: PRODUCTS: II
FILE REFERENCE: CCDNA-260XX
CURRENT APPLICATION UNMBER: US/09/385,982
CURRENT FILING DATE: 1999-08-30
EARLIER PILING DATE: 1999-06-08
EARLIER PILING DATE: 1999-01-27
EARLIER PILING DATE: 1999-01-27
EARLIER PILING DATE: 1999-01-27
EARLIER PILING DATE: 1999-01-27
EARLIER PILING DATE: 1998-01-27
EARLIER FILING DATE: 1998-01-27
EARLIER FILING DATE: 1998-08-31
NUMBER OF SEQ ID NOS: 544
SOFTWARE: FRSESEQ for Windows Version 3.0
SEQ ID NO 122
LENGTH: 551
1604 ATTTTGTTTTTTCTATGCTATA 1626
                                                                                                                                                   sequence 122, Application US/09385982
Patent No. 6262334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: misc feature
; LOCATION: (1)...(551)
; OTHER INFORMATION: n = A,T,C or G
US-09-385-982-122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -10-204-708-49/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
```

ò

```
Sequence 3, Application US/09801861

Sacure No. 6492154

GENERAL INFORMATION:
APPLICANT: YAN, Churhua et al.
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
FILE REFERENCE: CLO01098
CURRENT FILIAGO AND THE SOF FILE REFERENCE: 2001098
CURRENT FILIAGO AND THE 2001098
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31378 TTTÅTATATTTATATATTTATATATATATTTGTATATTATTATATTTTATATATTTTTATA 31437
                                                                                                                                                                                                                                                                                                                                                                                                                                      390 AATATCÁTTTTTTAAATTAAAAATTTTAACTAATTÄTTTTAATATAAAAATACCATTT 331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 185 CTCTTCCCATTAGTAACCATATAAAATTTATATTTTACTTGCCTTTTAAAATATGTAACA 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        66 AGTTAATTTGGTTTTATATTTTATGTTTTAGCATTTATGTGGTTCAAAGATCAAATCTACAA 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      246 AGTACATATAAATTTGCTGCTACTCCCTTCTTAGAGAAGTGGTAGAAACTATGTTATAŢ 305
                                                                                                                                                                                                                                                                                                           450 Aairtiaacritriaacrraaarrraircciaariaccitarritriarracrarraiaaar
                                                                                                                                                                                                                                                                                                                                                                             65 AAGTTAATTTGGTTTTATGTTTAGCATTTATGTTGTGGTTCAAAGATCAAATCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31258 TTGCTTTATCATCTACATTATTTTAATAATAATTCTAAAAATGGCAATCACGTATATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           186 TCTTCCCATTAGTAACCATATAAAATTTATATTTTTACTTGCCTTTTAAAATATGTAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5 ATTCTTGTATTATAACCATAACAGTTCACTAATTAAATTAAATTTAGGAATTGAATTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6 TTCTTGTATTATAACCATAACAGTTCACTAATTAAATTTAAATTTAGGAATTGAATTGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-204-708-49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                       Score 48; DB 4; Length 6306; Pred. No. 0.05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
1.9%; Score 47.8; DB 4; Length 5
Best Local Similarity 44.9%; Pred. No. 0.12;
Matches 181; Conservative 0; Mismatches 222; Indels
                                                                                                                       Query Match
1.9%; Score 48; DB 4; Le:
Best Local Similarity 49.2%; Pred. No. 0.05;
Matches 126; Conservative 0; Mismatches 130;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       245 AAGTACATATAAATTT 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                210 ccricaaraccarrir 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 53332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-801-861-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 3
```

```
GENERAL INFORMATION:
APPLICANT: Cassell, Gail H.
APPLICANT: Cassell, Gail H.
APPLICANT: Class, Jennifer S.
APPLICANT: Glass, Jennifer S.
APPLICANT: Glass, Jennifer S.
APPLICANT: Glass, John I.
APPLICANT: Lefkowitz, Elliot
TITLE OF INVENTION: URELITYTICH
TITLE OF INVENTION: URELITYTICH
FILE REPERENCE: UAB-13452/22
CURRENT FILING DATE: 2000-12-08
PRIOR APPLICATION NUMBER: 60/073,189
PRIOR FILING DATE: 1998-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1084 Archicerharicaarcharcharamerrimmacremenaaaagemenenene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               964 idgiairircarcarrahaagaarirccagcraaaaaaaararrahaararaaaaaaaa 1023
306 TGACTTATCAGACATTGTTTAACTGACATGGCATTTTTCTGCTACAAATGTTCCAGCAGT 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         67 GITAATITIGGITITATATITATGITIAGCATITATGIGGGTTCAAAGATCAAATCTACAAA 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               187 CTTCCCATTAGTAACCATATAAAATTTATATTTTACTTGCCTTTTAAAATATGTAACAAA 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7 TCTTGTATTATAACCATAACAGTTCACTAATTAAATTTAAATTTAGAATTGAATTGTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 8

US-07-91-867B-32/C

Sequence 32, Application US/07991867B

Patent No. 5476781

GENERAL INFORMATION:

APPLICANT: MOYER, Richard W.

APPLICANT: Hall, Richard L.

TITLE OF INVENTION: No. 5476781e1 Entomopoxvirus Expression System:

NUMBER OF SEQUENCES: 66

CORRESPONDENCE ADDRESS:

ADDRESSEE: David R. Saliwanchik
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 1353;
                                                                                                                         Query Match
1.8%; Score 45.8; DB 4; Length 13
Best Local Similarity 48.6%; Pred. No. 0.1;
Matches 125; Conservative 0; Mismatches 132; Indels
                                                                                   TAATAATCITIGCATATATCATTTTGCATTTTGTCAGTATAT 408
                                                                                                                                                                                          RESULT 7
US-09-601-198-37
Sequence 37, Application US/09601198
; Patent No. 6531583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Ureaplasma urealyticum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1204 rcarcaraacrarder 1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       247 GTACATATAAATTTGCT 263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 181
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-601-198-37
                                                                                   366
                                       셤
                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  &́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
TAATTTGGTTTTATATTTATGTTTAG-----CATTTATGTGGGTTCAAAGATCAAATT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      316 CTATAGAATGTGGGTAGTATAATATTACTTATTGCTATTTTTGTTATAAGATATATCTA 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           256 AATATGTTATÄTTTTTTÄATTTTGTTÄTAAATTTAAATTAATAATTTÄÄÄTTTÄÄÄA 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 243 CAAAGTACATATAAATTTGCTGCTACTCCCTTCTTAGAGAAGTGGTAGAAACTATGTTA 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       303 TATTGACTTATCAGACATTGTTTAACTGACATGGCATTTTTCTGCTACAAATGTTCCAGC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    436 TAGGAAAACATTATTAAAGTTACCAAATTTTATTTTAGATATTATTAATTTTTTAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             376 TTACTAAATTATTAATAAATTATAGTCATTTATATTACATGATTCACAATTTAAAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    183 CCCTCTTCCCATTAGTAACCATATAAAATTTATATTTTACTTGCCTTTTAAAATATGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             363 AGTIAATAATCTTTGCATATATCATTTTTGCATTTTTTGTCAGTATATCA 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 660;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                 COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/991,867B
FILING DATE: 12-DEC-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches 213;
STREET: 2421 N.W. 41st Street, Suite A-1 CITY: Gainesville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 45.2;
Pred. No. 0.
                                                                                                                                                                                                                                                CIASSIFICATION: 435
CIASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: W0 92/14818
FILING DATE: 12-FEB-192
PRIOR APPLICATION DATE: 007/827,685
FILING DATE: 30-0Nn-1992
PRIOR APPLICATION NUMBER: US 07/657,584
FILING DATE: 19-FEB-1991
ATTORNEY/AGENT INFORMATION:
NAME: Saliwanchik, David R.
REGISTRATION NUMBER: 31,794
REGISTRANICH/OCKET NUMBER: 31,794
REGISTRANICH/OCKET NUMBER: UF114.C3
TELEPHONE: 094-275-8100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 46.3%;
Matches 189; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : 660 base pairs
nucleic acid
EDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 904-372-5800
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            904-372-5800
                                                                                               COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
                                                                              32606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-07-991-867B-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ठे
```

```
REGISTRATION NUMBER: 35,746
REFERENCE/DOCKET NUMBER: UF114.C4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 904-375-8100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                  5.08-544-332-32/c
Sequence 32, Application US/08544332
Patent No. 5935777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Bencen, Gerard H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              : 660 base pairs
nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 32606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  904-372-580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO
SEQUENCE CHARACTERISTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 189; Conserv
                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Gain
STATE: FL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-544-332-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
    셤
                                            ઠ
                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATTGACTTATCAGACATTGTTTAACTGACATGGCATTTTTCTGCTACAAATGTTCCAGC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IAATITGGTITITATATITIATGTTTAG-----CATITIATGTGGTTCAAAGATCAAATCTA 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  256 AATAIGITATAITITTITATTITGITATAAATITTAAATITAATATTITAAATITTAAATITTGAAA 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                436 TAGGAAAAACATTATAAAGTTACCAAATTTATTTTAGATATTATTAATTTTTTTAAAT 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                376 TTACTABATTATABABATTATAGTCATTTATATTACATGATTCACAATTTAAAAATT 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTATAGAATGTGGTAGTATATTACTTATATTGCTATTTTGTTATAAGATATATCTA 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            243 CAAAGTACATATAAATTTGCTGCTACTCCCTTCTTAGAGAAGTGGTAGAAAACTATGTTA 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    196 тататадасттттаататтттстеваататтатттадалаттаттатсатататта 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            183 CCCTCTTCCCATTAGTAACCATATAAAATTTATATTTTACTTGCCTTTTAAAATATGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Moyer, Richard W.
APPLICANT: Hall, Richard L.
APPLICANT: Hall, Richard L.
APPLICANT: Hall, Richard L.
APPLICANT: Hall, Richard L.
APPLICANT: GraidI, Michael E.
APPLICANT: Britania Expression System
NUMBER OF SEQUENCES: 40
CORRESPONDENCE ADDRESS:
ADDRESSE: David R. Saliwanchik
STREET: 2421 N.W. 41st Street, Suite A-1
CITY: Gainesville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 660;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.8%; Score 45.2; DB 1; Length 6 llarity 46.3%; Pred. No. 0.11; Conservative 0; Mismatches 213; Indels
                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/107,755A
FILING DATE: 19-AUG-1993
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRICK APPLICATION DATA:
APPLICATION NUMBER: US 07/827,658
FILIND DATE: 30-7AN-1992
PRICK APPLICATION DATA:
APPLICATION NUMBER: US 07/657,584
FILING DATE: 19-FEB-1991
ATTORNEY/SALWANDALK, DAVIG R.
REGISTRATION NUMBER: 31,794
REPERNCE/DOCKET NUMBER: UF114.C2
TELECOMMUNICATION: TELEPHONE: (904) 375-8100
                      Application US/08107755A
                                                                                                                                                                                                                                                                                                                                                        E: Floppy disk
IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TOPOLOGY: unknown
; MOLECULE TYPE: DNA (genomic)
US-08-107-755A-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (904) 372-5800
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          660 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleic acid
                                                                                                                                                                                                                                                                                                             ZIP: 32606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 189; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM:
SOFTWARE: Patent
                                                                                                                                                                                                                                                                        Florida : U.S.A.
                                          Patent No. 5721352
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

```
69 TAAITIGGIITIAIAITITAIGIITAG-----CAITIAIGIGGIICAAAGAICAAAITA 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                 APPLICANT: Moyer, Richard W.
APPLICANT: Hall, Richard L.
APPLICANT: Hall, Richard L.
APPLICANT: Graid, Michael E.
AITLE OF INVENTION: NO. 5915777el Entomopoxvirus Expression System
NUMBER OF SEQUENCES: 77
CORRESPONDENCE ADDRESS:
363 AGTIAATAATCTTTGCATATATCATTTTGCATTTTTGTCAGTATATCA 410
                                           DB 2; Length 660;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.8%; Score 45.2; DB 2;
46.3%; Pred. No. 0.11;
iive 0; Mismatches 213;
                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Gerard H. Bencen
STREET: 2421 N.W. 41st Street, Suite A-1
CITY: Gainesville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 435
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/991,867
FILING DATE: 07-DEC-192
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/107,755
FILING DATE: 19-AUG-1933
PRIOR APPLICATION NUMBER: WO 92/14818
FILING DATE: 12-FEB-1992
PRIOR APPLICATION NUMBER: US 07/827,685
FILING DATE: 30-OAN-1992
PRIOR APPLICATION NUMBER: US 07/827,685
FILING DATE: 30-OAN-1992
FILING DATE: 19-FEB-1991
FILING DATE: 19-FEB-1991
FILING DATE: 19-FEB-1991
FILING DATE: 19-FEB-1991
```

```
243 CAAAGTACATATAAATTTGCTGCTACTCCTTCTTAGAGAAGTGGTAGAAAACTATGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 8, Application US/07991867B
Patent No. 5476781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 8: SEQUENCE CHARACTERISTICS: LENGTH: 1511 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SBS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            32606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-07-991-867B-8/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
NAME/KEY:
                                                                                                                                                      303
                                                                                                                                                                                                                                                                                 ò
                                                                           셤
                                                                                                                                                      ò
                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               436 TAGGAAAAACATTATTAAAGTTACCAAATTTATTTTAGATATTATATTTTTTAAAT 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  316 CTATAGAAIGIGGTAGTATATATTACTTATATTGCTATTTTTGTTATAAGATATATCTA 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             183 CCCTCTTCCCATTAGTAACCATATAAAATTTATATTTTACTTGCCTTTTAAAATATGTAA 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAATTTGGTTTTATATTTATGTTTAG-----CATTTATGTGGTTCAAAGATCAAATCTA 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    376 TTACTAAATTATTAATAAAATTATAGTCATTTATATTACATGATTCACAATTTAAAAATT 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           376 TIACTAAATTAATAAAATTATAGTCATTTATATTACATGATTCACAATTTAAAAATT 317
                                                                                                                                                      257
                                                                                                                                                                                                                       242
                                                                                                                                                                                                                                                                                 256 ARTATGITATATTITGATTITGTTATAAATTTAAATTTAATATTTAATTTTAAATTTGAAA 197
                                                                                                                                                                                                                                                                                                                                                  243 CAAAGTACATATAAATTTGCTGCTACTCCCTTCTTAGAGAAGTGGTAGAAAACTATGTTA 302
                                                                                                                                                                                                                                                                                                                                                                                                         TATTGACTTATCAGACATTGTTTAACTGACATGGCATTTTTTCTGCTACAAATGTTCCAGC 362
                                                                                            9 ITGIATTATAACCCATAACAGTTCACTAATTAAATTTAGGAATTGAATTGTTAAGT
                                                                                                                                                          316 cráragaarichegragraraaratrachtaratrechanterreinaraagarahaicha
                                                                                                                                                                                                                       183 CCCTCTTCCCATTAGTAACCATATAAATTTATATTTTACTTGCCTTTTAAAATATATGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-370-861A-32/C

| Sequence 32, Application US/09370861A
| Patent No. 6410201
| GENERAL INFORMATION:
| APPLICANT: Hall, Richard L.
| APPLICANT: Graid! Michael E.
| TILLE OF INVENTION: No. 6410221el Entomopoxvirus Expression System
| TILLE OF INVENTION WUMBER: US/09/370,861A
| CURRENT APPLICATION WUMBER: US/09/370,861A
| CURRENT FILING DATE: 1999-08-09
| PRIOR PILING DATE: 1992-08-09
| PRIOR FILING DATE: 1992-02-12
| PRIOR APPLICATION NUMBER: US 08/107,755
| PRIOR APPLICATION NUMBER: US 09/14818
| PRIOR FILING DATE: 1992-02-12
| PRIOR FILING DATE: 1992-02-13
| PRIOR FILING DATE: 1992-03-14818
| PRIOR FILING DATE: 1993-03-14818
| PRIOR FILING DATE: 1993-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            363 AGTTAATAATCTTTGCATATATCATTTTTGCATTTTTGTCAGTATATCA 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
1.8%; Score 45.2; DB 4; Length 660;
Best Local Similarity 46.3%; Pred. No. 0.11;
Matches 189; Conservative 0; Mismatches 213; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rGrinaritaritaritararitariariaritarararitaria 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ) ORGANISM: Amsacta moorei entomopoxvirus
US-09-370-861A-32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ф.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                          임
                                                                                               ò
```

```
362
                                                      TATTGACTTATCAGACATTGTTTAACTGACATGGCATTTTTCTGCTACAAATGTTCCAGC
                                                                                                             GENERAL INFORMATION:
APPLICANT: Mayer, Richard W.
APPLICANT: Hall, Richard L.
APPLICANT: Graid, Michael E.
TITLE OF INVENTION: No. 5476781el Entomopoxvirus Expression System NUMBER OF SEQUENCES: 66
CORRESPONDENCE ADDRESS:
ADDRESSEE: Davin R. Saliwanchik
STREET: 2421 N.W. 41st Street, Suite A-1
CITTY: Gainesville
STATE: FL
                                                                                                                                                                    363 AGTTAATAATCTTTGCATATCATTTTGCATTTTTGTCAGTATATCA 410
                                                                                                                                                                                                                           COMPUTER: READABLE FORM:
MEDIUM TYPE: Rloppy disk
COMPUTER: READABLE FORM:
MEDIUM TYPE: Rloppy disk
COMPUTER: LBM PC compatible
COMPUTER: DEAL PROCESSIONS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/07/991,867B
FILING DATE: 12-DEC-1992
CLASSIFICATION NUMBER: W0 92/14818
FILING DATE: 12-PEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/827,685
FILING DATE: 12-PEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/657,584
FILING DATE: 19-FEB-1991
ATTORNEY/AGENT INFORMATION:
NAME: SALVABACHION NUMBER: 31,794
REGISTRATION NUMBER: 31,794
REGISTRATION NUMBER: 31,794
REFERENCE/DOCKET NUMBER: UF114.C3
TELECOMMUNICATION INFORMATION:
TELEBERK: 904-375-8100
THEREFAX: 904-375-8100
THEREFAX: 904-375-8100
THEREFAX: PAGENT INFORMATION:
TELEBERK: 904-375-8100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Amsacta moorei entemopoxvirus
```

```
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                    1287 TAGGAAAACATTATTAAAGTTACCAAATTTATTTTAGATATTATTAATTTTTTAAAT 1228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1167 CTATAGAATGTGGTAGTATATATATTACTTATTGCTATTTTTGTTATAGATATATGTA 1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1227 TTACTAAATTATTAATAAATTATAGTCATTTATATTACATGATTCACAATTTAAAAATT 1168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         69 TAATTIGGITITATATTITAGTTTAG-----CATTIATGIGGTICAAAGATCIA 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       123 CAMANTANTGININGTCAMAGANTCINCTICCTICCTGCCCCTTCAMANTANTTICTC 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   183 CCCTCTTCCCATTAGTAACCATATAAAATTTAATATTTACTTGCCTTTTAAAATATGTAA 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                243 CAAAGTACATATAAATTTGCTGCTACTCCCTTCTTAGAGAAGTGGTAGAAAACTATGTTA 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                303 TATIGACTIAICAGACATIGITIAACIGACAIGGCAITITICIGCIACAAIGTICCAGC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Grand, Michael E.
TITLE OF INVENTION: No. 5721352el Entomopoxvirus Expression System
NUMBER OF SEQUENCES: 40
CORRESPONDENCE ADDRESS:
ADDRESSEE: David R. Saliwanchik
STREET: 2421 N.W. 41st Street, Suite A-1
CITY: Gainesville
STATE: Florida
COUWTRY: U.S.A.
ZIP: 32506
                                                                                                                                                                                                   ;
è
                                                                                                                     1.8%; Score 45.2; DB 1; Length 1511; 46.3%; Pred. No. 0.15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     363 AGTTAATAATCTTTGCATATATCATTTTGCATTTTTGTCAGTATATCA 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches 213; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
CCMPUTER: IBM PC compatible
CCMPUTER: IBM PC compatible
OPERATING SYSTEM: PC_DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURSTEICATION DATA:
APPLICATION NUMBER: US/08/107,755A
FILING DATE: 19-AUG-1993
CLASSIFICATION 1435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/827,658
FILING DATE: 30-JAN-1992
PRIOR APPLICATION NUMBER: US 07/827,584
FILING DATE: 19-FEB-1991
ATFORMEY/AGENT INPORMATION:
ATTORNEY/AGENT ATTORNE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Saliwanchik, David R.
REGISTRATION NUMBER: 31,794
REFERENCE/DOCKET NUMBER: UF114.C2
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 13
US-08-107-755A-8/C
'Sequence 8, Application US/08107755A
'Parent No. 5721352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Moyer, Richard W. APPLICANT: Hall, Richard L.
                                                                                                             Query Match
Best Local Similarity 46.3<sup>3</sup>
Matches 189; Conservative
LOCATION: 852..1511
                   ;
US-07-991-867B-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>а</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

```
1227 TTACTAAATTATTAATAAATTATAGTCATTTATATTACATGATTCACAATTTAAAAATT 1168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1107 ААТАТGTTATATTTTTAATTTTGTTATAAAATTTAATAATAATATTTAATATTTAATTTTGAAA 1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    69 TAATTIGGITTIATATITTAIGITTAG-----CATTIATGIGGITCAAAGATCTA 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        183 CCCICTICCCATTAGIAACCATATAAAATTTATATTTTACTIGCCTTTTAAAAIATGTAA 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1047 TATATAAACTTTTTAATATTTTCTGGAATATTTTAAAATATTATTATCATAATATATTA 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              303 IATTGACTTATCAGACATTGTTTAACTGACATGGCATTTTTCTGCTACAAATGTTCCAGC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      243 CAAAGTACATATAAATTTGCTGCTACTCCCTTCTTAGAGAAGTGGTAGAAACTATGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 8. Application US/08544332
Patent No. 5935777
GENERAL INFORMATION:
APPLICANT: Moyer, Richard M.
APPLICANT: Hall, Richard L.
APPLICANT: Gruidl, Michael E.
TITLE OF INVERTION: 77
CORRESPONDENCE ADDRESS:
ADDRESSEE Gerard H. Bencen
STREET: 2421 N.W. 41st Street, Suite A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 1.8%; Score 45.2; DB 1; Length 1511; Best Local Similarity 46.3%; Pred. No. 0.15; Matches 189; Conservative 0; Mismatches 213; Indels 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    363 AGTIBATATIATCTTTGCATATATCATTTTGCATTTTTGTCAGTATATCA 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Amsacta moorei entemopoxvirus
                                                                                                                                                                                                                                                                                                                                                      complement (234..782)
                                                                                                                                                                                                                                                                                        complement (18..218)
                                                                                                                                                                     MOLECULE TYPE: DNA (genomic) ORIGINAL SOURCE:
  (904) 375-8100
                TELEFAX: (904) 372-5800
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
                                                                                 LENGTH: 1511 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 32606
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                     852..1511
                                                                                                                                                       unknown
TELEPHONE:
                                                                                                                                                                                                                                                                                                           FEATURE:
NAME/KEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-544-332-8/c
                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                    LOCATION:
                                                                                                                                                                                                                                                                NAME/KEY:
                                                                                                                                                                                                                                                                                          LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                       ;
US-08-107-755A-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: (STATE:
                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                            PEATURE:
```

```
1167 cranagaaridinggragraraharaharacharahigcharmingrrarahagaraharan 1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1287 iadgaaaacarrairaakdriaccaarriraririrragararrarraarririraaar 1228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1227 tractaaatratraaraaarraradercarrrararracarearredaarraaaaarr 1168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1107 AATATGİTATAİTİTİTAATTİTGTTATAAAİTİAAATTAATATAİTİTAAİTİTĞAAA 1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 69 TAATTIGGTITTATATTITATGTTTAG------CATTIATGTGGTTCAAAGATCAAATCTA 122
                                                                                          183 CCCTCTTCCCATTAGTAACCATATAAAATTTATATTTTACTTGCCTTTTAAAATATGTAA 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    243 CAAAGTACATATAAATTTGCTGCTACTCCTTTTAGAGAAGTGGTAGAAAACTATGTTA 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1047 TATATAAACTTTTAATATTTTCTGGAATATTATTAAAATATTATTATCATAATATATTA 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATIGACITATCAGACATIGITTAACTGACATGGCATTTTTCTGCTACAAATGTTCCAGC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            987 tatigcaatterraaattaaetaartrirriraaratatarraarakaraaeerrai
                                                  303 TATTGACTTATCAGACATTGTTTAACTGACATGGCATTTTTTCTGCTACAAATGTTCCAGC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL IN FORCH ALON:
APPLICANT: MOYET, Richard W.
APPLICANT: Moyer, Richard L.
APPLICANT: Hall, Richard L.
APPLICANT: Gruidl, Michael E.
TITLE OF INVENTION: No. 6410221el Entomopoxvirus Expression System
TILE REFERENCE: UF114.C4.D1
CURRENT APPLICATION NUMBER: US/09/370,861A
CURRENT FILING DATE: 1992-08-09
PRIOR PELING DATE: 1992-12-07
PRIOR PILING DATE: 1993-12-07
PRIOR PILING DATE: 1992-01-30
PRIOR APPLICATION NUMBER: WO 92/14818
PRIOR APPLICATION NUMBER: WO 92/14818
PRIOR PILING DATE: 1992-01-30
PRIOR FILING DATE: 1992-01-30
PRIOR FILING DATE: 1992-01-30
PRIOR FILING DATE: 1992-01-30
PRIOR FILING DATE: 1992-01-30
PRIOR FILING DATE: 1991-02-19
NUMBER OF SEQ ID NOS: 78
SOFTWARE: Patentin version 3.1
FUNDER OF SEQ ID NOS: 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          363 AGTIAATAATCITIGCATATATCATTITIGCATTITIGTCAGTATATCA 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
1.8%; Score 45.2; DB 4; Length 1511;
Best Local Similarity 46.3%; Pred. No. 0.15;
Matches 189; Conservative 0; Mismatches 213; Indels 6
                                                                                                                                             363 AGTIRATARICTTTGCATATCATTTTGCATTTTGTCAGTATATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: DNA; Amsacta moorei entomopoxvirus
US-09-370-861A-8
                                                                                                                                                                                                                                                                 RESULT 15
US-09-370-861A-8/c
Sequence 8, Application US/09370861A
Patent No. 6410221
                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    303
                                                                                          g
                                                                                                                                               Ś
                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1287 TAĞGAAAAACATTATTAAAĞTTACCAAATTTATTTTAGATATTATTATTATTATTTTTTAAAT 1228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1227 iraciaaairairaaraaarraragrearrrarriaeargaricaearrarraaaarr 1168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    69 TAATTITGGTTTTATATTTATGTTTAG-----CATTTATGTGGTTCAAAGGTCAAATCTA 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               243 CAAAGTACATATAAATTTGCTGCTACTCCTTTAGAGAAGTGGTAGAAAACTATGTTA 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1047 TATATAAACTTTTAATATTTTCTGGAATATTATTTAAAATATTATTATCATAATATTATTA 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 123 CAAAATAATGTATAGTCAAAGAATCTATCTTCCTTCTCTGCCCCTTCAAATAATTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 183 CCCTCTTCCCATTAGTAACCATATAAAATTTATATTTTACTTGCCTTTTAAAATATGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1511;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
1.8%; Score 45.2; DB 2; Length 1
Best Local Similarity 46.3%; Pred. No. 0.15;
Matches 189; Conservative 0; Mismatches 213; Indels
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/544,332
FILING DATE: 0.-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/991,867
FILING DATE: 0.-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/107,755
FILING DATE: 19-AUG-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: W 092/14818
FILING DATE: 19-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/657,584
FILING DATE: 30-AJAN-1992
PRIOR APPLICATION NUMBER: US 07/657,584
FILING DATE: 19-FEB-1991
PRIOR APPLICATION NUMBER: US 07/657,584
FILING DATE: 19-FEB-1991
ATTORNEY/AGENT INFORMATION:
NAME: Bencen, Gerard H.
REGISTRATION NUMBER: UF114.C4
TELEFAX: 904-375-8100
TELEFAX: 904-375-8100
TELEFAX: 904-375-800
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 1511 base pairs
TYPE: nucleic acid
STANDEDNESS: double
TOPOLOGY: UNKNOWN
TTELEFAX: DATA GENOMICA
TYPE: UNKNOWN
TTELEFAX: DATA GENOMICA
TYPE: UNKNOWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Amsacta moorei entemopoxvirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           complement (234..782)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       complement (18..218)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: DNA (genomic) ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDS
852..1511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
US-08-544-332-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

6; Gaps

Search completed: April 26, 2004, 02:11:16 Job time: 125.228 secs

us-10-051-835-18.rng

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.	OM nucleic - nucleic search, using sw model	Run on: April 24, 2004, 23:47:42; Search time 660.01 Seconds (without alignments) 15998.422 Million cell updates/sec	Title: Perfect score: 2484 Sequence: 1 gtttattcttgtattataacataaatttcttataaaactc 2484	Scoring table: IDENTITY NUC Gapop 10.0 , Gapext 1.0	Searched: 3373863 segs, 2124099041 residues	Total number of hits satisfying chosen parameters: 6747726	Minimum DB seq length: 0 Maximum DB seq length: 2000000000	Post-processing: Minimum Match 10% Maximum Match 100% Listing first 45 summaries	Database : N Geneseq_29Jan04:* 1: geneseqn1990s:* 2: geneseqn1990s:* 3: geneseqn2000s:* 4: geneseqn2001bs:* 5: geneseqn2001bs:* 6: geneseqn2001bs:* 7: geneseqn2003s:* 8: geneseqn2003s:*	10: genesegn20048:*
--	---	--	--	--	---	--	---	--	--	---------------------

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	Abx63692 Human cDN	Acd42248 Human hep	Ade25678 Human cDN	Aas60823 Human can	Abx63519 Human cDN	Aax33941 Human HCM	Abn59995 Novel hum	Aan81259 Sequence	Aas60407 Human can	Abl80943 Human ova	Abx63520 Human cDN	Aas60100 Human can	Aah34468 Human col	Aas27231 cDNA enco	Adb93409 Human cDN	Human	Abk29513 Colon ade	Abt06900 Human ova	Abx72778 Human ova	Abs76439 cDNA enco	Add18927 Human dis	Aaa08592 Human cyt	Abx63510 Human cDN	
SUMMARIES	a	ABX63692	ACD42248	ADE25678	AAS60823	ABX63519	AAX33941	ABN59995	AAN81259	AAS60407	ABL80943	ABX63520	AAS60100	AAH34468	AAS27231	ADB93409	ABX63603	ABK29513	ABT06900	ABX72778	ABS76439	ADD18927	AAA08592	ABX63510	
	DB	7	œ	0	4	۲-	7	9	Н	4	9	7	4	4	4	σ	7	9	9	7	9	σ	٣	7	
	* Query Match Length	2484	2741	2741	2527	2068	1335	1679	1332	567	482	2515	580	977	3276	3276	9	272	240	240	2058	2058	2062	2062	
	% Query Match	100.0				Н	18	18.3	18.1	16.7	14.8	14.3	13.3	12.7	12.5	12.5	11.3	11.0	6.7	7.6	7.9	7.9	7.9	7.9	
	Score	2484	1358	1358	1235.2	456.6	455	455	448.6	415.4	368	'n	331.2	315.4	-	311	281	272	240	240			196.8	196.8	
	Result No.	1	7	m	4	ហ	,	7	80	6	10	11	12	13	14	15	16	c 17	18	19	20	21	22	23	

.6 652 6 ABQ57002 Abq57002	.1 14160 4 AAK65583 Aak65583 Human 1 14160 4 AAK65583 Human 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20112302 20112302	.0 227 7 ABT14722 Abt14722 Humar	.0 135 7 ABT14802 Abt14802 Humar	.8 410 2 AAT22120 Humar	.4 60 6 ABN46205 Humar	.4 7490 6 ABL32283	.4 05357 6 AAU40005 100000 Adu40005 Aumidi	.3 6075 6 AAS61317 Aas61317 Humar	.2 15387 6 ABL32184 Abl32184	.2 337 3 AAC05156 Aac05156	.2 8056 7 ABZ10246 Abz10246	.2 8056 7 ABZI0100 ADZI0100	.2 551 3 AAA1611/ 1 5000 7 AA41610	.1 159400 6 ABO88126 Abd88126 Human os	.1 6071 6 ABL92214 Abl92214	.1 6071 6 AAD22315 Chemical .1 6106 4 AAS46429 Aas46429 Tumour s	ALIGNMENTS	lard, chwa, 2484 RD	, com		first entry)	2 differentially expressed in activated vascular tissue.		se; vascular tissue; cytostatic; atherosclerosis; cardiant; antidiabetic; gynaecological; vasctropic; cerebroprotective; vascular disease; cancer; coronary; artery disease; ci diabetes; pre-eclampsia; restenosis; per-eclampsia; restenosis;		•		:002US-00044090.	0000US-0222469P.				97/10.	r diagnosing, staging, treating, or monitoring the itreatment of a vascular disease, e.g. atherosclerosis, sral cDNAs that are differentially expressed in activated is.	18pp; English.	to a	ed in activated vascular tissue. The invention a ghout method for detecting differentially expres CDNAs of the invention may have	cytost cytost
· •	4.		r 4	. 4	m	2	٠i ٥	, c		· ~	د	٠i ٥	Ni c	, c	i ~	2	4.49		ם די מבר די			103 (£	A #692	:	r ob c	ens.	Š	-2002.	2002; 20	000; 20	RANDMAN			-1105	on for donor of trees several tissue.	Page;	intion	high	ioscle
163.4	56	50	0 0	١œ	ß		4.0	7 02	٠,	4	4	4.	4 (ກ	2 50	52	52 51.6		T 1 692 3883692	1000	ABX63692;	6-FEB-200	Human cDNA	1	Human; gene; hypotensive; gene therapy; hypertension; ischaemia-rep	Homo sapi		26-SEP-20	8-JAN-20	8-JUL-20 8-JAN-20	HAND/)		Bandman O	WPI.; 2003	Combination progression comprises se vascular tit	ru.	his inve	discloses	antiarteric gynaecologi
4.2	2 2	1 (10	200	ψ	31	32) (1)	· m	37	80 0	O (4, 4	* 4	43	44 45		RESULT ABX6369			(1							/°	00						ប			
υ		,	נ				O	,	ט ט)		O.	υ)	υ	U		AB)	X	Z,	1 5	X E	X	2222	X S	ž	ZXE!	4 E S	3	X	Ž	PI Y	· 舌 注	\	\$ 23 \$	\$ 8 8	388	388

throughput methods for detecting differential expression of one or more throughput methods for detecting differential expression of one or more compounds in a sample, or screening several molecules or compounds to identify a light of the compounds to identify a light of the compounds to invention. A protein encoded by the cDNA may be used to screen several completes or compounds to identify a light of the protein that can be used to detect a protein in a sample or purify an antibody to the protein that can be used to detect a protein in a sample or purify a natural or compounds to the protein from a sample. The nucleotides may be useful for diagnosing, staging, treating, or monitoring the progression of treatment of a vascular disease, eg. atheroscalerosis, cancer, coronary artery disease, hypertension, diabetes, pre-eclampsia, ischeemia- reperfusion injury, restenosis, or stroke. The cDNAs can also be used for large-scale genetic or gene expression analysis of several new nucleic acid angleoules. Antibodies to the proteins encoded by the cDNAs are useful for diagnosing pre-pathologic disorders, and chronic or acute diseases associated with abnormalities in the expression, amount or distribution of the protein. The present sequence represents a cDNA of the invention that is differentially expressed in activated vacular tissue. Note: The sequence data for this patent did not form part of the specification, but was obtained in electronic format directly from USPTO at

g

ઠે g ઠે g

8,8

ò 셤 ò 임 ઠ

	0	09	120	180	240	300	360	420	480	540	600	099
Sequence 2484 BP; 657 A; 488 C; 436 G; 903 T; 0 U; 0 Other;	lery Match 100.0%; Score 2484; DB 7; Length 2484; st Local Similarity 100.0%; Pred. No. 0; tches 2484; Conservative 0; Mismatches 0; Indels 0; Gaps	aacagitcactaattaaattaaattaagaattgaat 	61 IGTTAAGTTAATTTGGTTTTATATTTATGTTTAGCATTTATGTGGTTCAAAGATCAAATC :	121 TACAAATAATGTATAGTCAAAGAATCTATCTTCCTTCTGCCCCTTCAAATAAAT	181 ICCCCTCTTCCCATTAGRACCATATAAATTTATATTTTACTTGCCTTTTAAATATGT	241 AACAAAGTACATATAAATTTGCTGCTACTCCCTTCTTAGAGAAGTGGTAGAAAACTATGT 241 AACAAAGTACATATAAATTTGCTGCTACTCCCTTCTTAGAGAAGTGGTAGAAAACTATGT	301 TATATTGACTTATCAGACATTGTTTAACTGACATGGCATTTTTCTGCTACAAATGTTCCA :	361 GCAGTTAATAATCTTTGCATATATCATTTTGCATTTTTGTCAGTATATCAGTGGGACAGA	421 TICCCBACAGAGAGGGTAGAIGAAGAGTAAAGTCAICTCACCITGGACCCCTTCCCTC	481 CITGCGCTCTGCTTGATGGTACCAGCTTTTTTTTCTGAATGCTCTTACTTCCATCTGTCG	541 GCAGATTGCCTCTTTATCTAGAACACTTTCAGCCATATCCTTATTCTCTTTAGCAGACT	601 CACTCCTGCTATTTAGCTCTCAGATTACATGTCCTTTCCTCACAGAGGCTTACTTGAC

g

음

ò

유 ò ద 8 g

 $\dot{\delta}$

1800	1 TCATCTIAGICCCTCTICAIGCAGIAIGGICAITGCIAGGIAGGIAIGICCT	17.	i Ö
1740		Oy 168	0 7
00		ਜ	a
	11 GGACCTAGAACTIGGATTIGGATTIGGTCCTGATCAGATGAGACCTTTGATTAGTTAGTTAGTTA	Qy 162	~
		i #i	v 7
	GITTTTCCTTTTTGTCTTTGAGATGAAAGGTTTTAAAAAAAA		~ <i>i</i>
	1 GTTTTCCCTTTTGTCTTGAGATGAAAGTTTTAAAATAATCCACCTCTGTCATTTCCAC	# 1	ਨੇਂਂ
	1 ATTTTTCCCTCCTTGCATTCCCTCTTTTCCTGGAGTTCATACTAGAGAATCTGCACTAT	14	셤
	.1 ATTITICCCTCCTTGCATTTCCCTCTTTTCCTGGAGTTCATAGTAGAGAATCTGCACTAT	14	ਨੇ
		13	· 8
	1 GICITITIGIGGGIIGIIGCCCIGIGAIIAGIICIGCIITITIAACCCACICCCIGGAIGC	13	ਨੇ
1380	1. CAAGCGGTCAGGTAGTTGGCTACTTTCTGCTTGGATCTATTAATAATACTGCGGGGCGCTTCT GAAGCGGTCAGGTAGGTTGCTACTTTCTGCTTGGATCTATTAAATACCTGGCAGGTTCTCT GAAGCGGTGAGTGGCTACTTTCTGCTTGGATCTATTAAATACCTGGCAGCTCTCT	r 132	8 6
N	- C	12	8
1320	CTI	126	ਨੇ
	1. CCTIGTRARGENGITCTRATTCTTTCTGCTCTGARACGANIGCTRIGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT	3 3	8 8
	1 TGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGA	T	용
	1 IGGATITIGCICITITCTGACAICTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGA	뒤	ਨੇ
		í ਜ	5 음
	1 GGIACATGIGGCTITGCTCACTCATGGGAIAGCATGGATTTGATTACAAAGGTGACCT	ī	ብ
1080	1 GGIACATGTGGCTTTGCTCACTCATGTGGATGGATTTGATTACAAAAGGTGACCT	Ä	⋧
~	1 CTCCTCTCAGATGATAGTAAAGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGT	O.	. A
1020	1 CTCCTCTCAGATGATAGAAGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGT	u.	্ব
096	801 GCTGAAGGACAGAATTCAFTGTGGCCAFTTGTAFTTGATGCCAGCTCTATTCAAFACTT 960 	01 01	2 8
006	1 ACAGTTTAATCCCATGGAATCAATCAAATTAAATCATCATGACTACATTGATTCCCCATC	w	8
006	1 ACAGTITAATCCCAIGGAATCAATCAAATTAAATCATGACTACATGATTCCCCATC	w	⋧
840 840	1 GGTACATAGTTTGTGCTCATAAATATTTTTTGAATTAAATTATCTTGCTTTATTTA		ል ል
780	1 CCTCATACTATTAGAGACTTTTCTGTTTTGTTTACCATTTGATTCACTTGCACAGTGCCT		윤
780	1 CCTCATACTA THAGACACTTTCTGTTTTGTTTACCATTTGATTCACTTGCACAGAGCCT		~
720	1 TAGGTGAAAGGACTGCTGGCTTACTTGCATAATGCCTGTTTCTTCTACCAAGATTGTTAG	υ Ψ	ჯ გ
720	1 かんこうしょうしゅん かんこうしん かんかん かんかん かんない かんかん かんかん かんかん かんかん かんか		ž

Ä. Karpf

3

```
Lasek AKW, Jones DA,
                                             WPI; 2003-503249/47
     (LASE/) LASEK A K W (JONE/) JONES D A. (KARP/) KARPF A R.
                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                       쉱
                                                                                                                                                                                                                                                                                                                      ò
ઠે
                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                          2460
                                                                                                                                                                                                                                                     2340
                                                                                                                                                                                                                                                                  2400
                                                                                                                                                                                                                                                                                             2460
                                                                                                                                                       2160
                                                                                                                                                                                                                                        2340
                                                                                                                                                                                                                                                                                2400
                    1860
                                             1980
                                                                                                  2040
                                                                                                                2040
                                                                                                                             2100
                                                                                                                                           2100
                                                                                                                                                                      2160
                                                                                                                                                                                   2220
                                                                                                                                                                                               2220
                                                                                                                                                                                                             2280
                                                                                                                                                                                                                          2280
                                 1860
                                                                                GTGGTCCAATATTCCTCTCCCTCTGGTTGCCTTTCCTGAGATATTCCACTAAGAATATT
                                                                                                                                                                                           2161 TIGIGITICITITICICAGGGAATCIAAGGGAGGAAATTATCAACIGIGCACAAGAAAA
                                                                                                                                                                                                                                                 1981 TIGCTGGGAAACTCTCATGTTACTAACTTTGTTGCTCTAACTCTGCCATCTTGGTTTCCC
                                                                                                                            AATAGATATGTGAAAGGTTCACGTAAATTTCCTCACACATCACAGAAGATTAAAATTCAGAA
                                                                                                                                                                                                                       AGGAGAAAACACAGACCAAAGAAGTATCTAAGACCAAAGGGATGTGTTTTATTAATGT
                                                                                                                                                                                                                                                                  CTAGGATGAAGAAATGCATAGAACATTGTAGTACTTGTAAATAACTAGAAATAACATGAT
                                                                                                                                                                                                                                                                                craccarcaacaaarccaracaarcarreracracracracaaaraacarcar
                                                                                                                                                                                                                                                                                             TTAGTCATAATTGTGAAAAATAATAATTTTTTTTTTTGGATTTATGTTCTGTATCTGTGA
                           TITAGEGCTIGGGAAATCAATTCAGAATATCACATCCTCTCCCAATTCTCTTACTCAAA
                                                                                                   TTGCTGGGAAACTCTCATGTTACTTTGTTGCTCTAACTCTGCCATCTTGGTTTCCC
                                                                                                                                     GTGGTCCAATATTCCTTTCCCTCTGGTTGCCTTTCCTGAGATAATCCACTAAGAATATT
                                                                                                                                                                                   TTGTGTTTTCTTTTCTCAGGGAATCTAAGGGAGGAAATTATCAACTGTGCACAAGGAAAAA
TCATCTTAGTCCCTCTTCATGCAGTATGGTCATTGCTAGGTAGAGGTATGTCTTTATG
                                                                                                                                                                                                                                                                                                                        AAAAATTTCTTATAAACTC 2484
                                                                                                                                                                                                                                                                                                                                 2401
                                                                                                                                                                                                                                                                                 2341
                                                                                                                                                                                                                                                                                              2401
                                                                                                                                                                                                                                                                                                                         2461
                                                                                                                                                                                                                           2221
                                                                                                                                                                                                                                                       2281
                                                                                                                                                                                                                                                                   2341
                                                                                                                                                                                                                                                                                                                                      2461
                                                                                      1921
                                                                                                    1981
                                                                                                                               2041
                                                                                                                                                         2101
                                                                                                                                                                       2101
                                                                                                                                                                                    2161
                                                                                                                                                                                                               2221
                                                                                                                                                                                                                                         2281
                                 1801
                                               1861
                                                            1861
                                                                          1921
                     1801
        1741
                                                                                                                          8 8
                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                               8 6
                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                   ઠે
                                           8 6
                                                                     δ
                                                                                   8 8 8
                                                                                                                                                       ઠ
                                                                                                                                                                 8 8
                                                                                                                                                                                              g
                                                                                                                                                                                                          8 6
                                                                                                                                                                                                                                         ò
                               a
                     ઠે
```

Human hepatitis C microtubular aggregate cDNA Incyte 231486.26 Human; ss; DNA methylation; cancer; colon cancer 멾 ACD42248 standard; cDNA; 2741 07-MAR-2002; 2002US-00093766 19-MAR-2001; 2001US-0277380P (first entry) US2003013099-A1 Homo sapiens 16-JAN-2003 05-SEP-2003

```
1474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATCAGATGAGACCTTTGATTATTTGCCCCTTTAGGACCTTACACTCCTTTTCT 1714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATCAGATGAGACCTTTGATTATTTGCCCCTTCCTTAGGACCTTACACTCCTGTCTTTCT 1963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1414
                                                                                                                 The invention relates to a combination comprising cDNAs which are expressed in a disorder or process associated with DNA methylation. The combination and cDNAs are useful for diagnosing, staging, treating or monitoring treatment of cancer, e.g. colon cancer and for detecting changes in expression of genes encoding proteins that are associated with DNA methylation. The protein is useful for screening molecules or compounds to identify at least one ligand that binds to the protein and for producing an antibody. The present sequence represents a cDNA expressed in a disorder or process associated with DNA methylation
New combination comprising cDNAs that are expressed in a disorder or process associated with DNA methylation, useful for diagnosing, staging, treating or monitoring treatment of cancer, e.g. colon cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGACTTGCCTTTTTGTTTCTTTCCTTCATTAGTCCCTCTTCATGCAGTATGGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTTGAGAAAAAGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAATAATCCACCTCTGTCATTTCCACTCTCTGAACATCCCAAGCTGTATCCCTGGCCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATAATCCACCTCTGTCATTTCCACTCTCTGAACATCCCAAGCTGTATCCCTGGCCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1116 AGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1364 AGCIAGAGGAAGTCCAAAGAAACTIGGATTTGCTCTTTCTGACAICTCGGTGGTTAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1424 ATTATICCTCIGAGIGGGAGCIGGACCCIGIAAAGGAIGITCIAAITCTITCIGCICIGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                danchringeregrenedadechredadecechedeerkerregentreechrede
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCTATTAAATACCTGGCAGCTCTCTGTCTTTTTTGTGGGTTGTTGCCCTGTGATTAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTICATACTAGAGAATCTGCACTATGTTTTTCCCTTTTTGTCTTGAGATGAAGTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATG-GTTTGGTGGTGTGGAAGCTTGGAAGCGGTCAGGTAGTTGGCTACTTTCTGCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCTTTTTAACCCACTCCCTGGATGCATTTTTCCCTCCTTGCATTTCCCTCTTTTCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTGAGCAAATAGGTA
                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                   ä
                                                                                                                                                                                                                                                                                                                                                           Length 2741;
                                                                                                                                                                                                                                                                                                                       Sequence 2741 BP; 841 A; 452 C; 529 G; 919 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                         Query Match

54.7%; Score 1358; DB 8; Length 27

Best Local Similarity 99.9%; Pred. No. 5.6e-296;

Matches 1369; Conservative 0; Mismatches 0; Indels
                                                                                  Claim 2; Page 58-59; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ૪
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      영 참
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

Kaser MR;

Porter JG,

dikita T,

(INCY-) INCYTE GENOMICS INC. Shiffman D,

```
2683
                                                                                                                                                                                                                                                                                                                                                                                         2563
                                                                                                                                                                                                                                                                                                                                                                                                                                                         2434
                                                                                                                                                                                                                                                                                2194
                                                                                                                                                                                                                                                                                                      2443
                                                                                                                                                                                                                                                                                                                                                                                                                            1894
                                                                                    2143
                                                                                                         1954
                                                                                                                              2203
                                                                                                                                                   2014
                                                                                                                                                                       2263
                                                                                                                                                                                            2074
                                                                                                                                                                                                                 2323
                                                                                                                                                                                                                                      2134
                                                                                                                                                                                                                                                           2383
                                                                                                                                                                                                                                                                                                                            2254
                                                                                                                                                                                                                                                                                                                                      ACATCACAGAAGATTAAAATTCAGAAAGGAGAAAACACAGACCAAAGAGAAGTATCTAAG 2314
                                                                                                                                                                                                                                                                                                                                                                                                              ACCADAGGGATGTTTTTATTTAATGTCTAGGATGAAAATGCATAGAACATTGTAGTAC 2374
                                          2083
TIGACITIGCCITITIGITICCTITCATCTIAGICCCTCTTCAIGCAGTAIGGICATT 2023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2624 TIGTAAATAACTAGAAATAACATGATTTAGTCATAATTGTGAAAAAATAATAATTTTT
                                                                          TCCTGAGATAATCCACTAAGAATATTTTTGTGTTTTCTTTTTTCTCAGGGAATCTAAGGGAGGA
                                                                                                                                                                                                                                                                                                                            AATTATCAACTGTGCACAAAGGAAAAATAGATATGTGAAAGGTTCACGTAAATTTCCTC
                                                                                                                                                                                                                                                                                                                                                                                     TIGTABATAACTAGAAATAACATGATTTAGTCATAATTGTGAAAAATAATAATAATTTTT
                                  GCTAGGTAGAGGTATGTCCTTTTATGTAATGGCCACCGCATTTAGTATTACATAAAACTTT
                                                              CTITIPACAATCIGIGCATAGIACAIGCIGCICTGITCCATITAGAGAITTGACAGAGGI
                                                                                                                     2144 TICAGITITAGIAIACTICAAAICTIATITITAGIGCIIGGGAAAICAATICAGAAIAICACA
                                                                                                                                                 TCCTCTCCCAATTCTCTTACTCAAATTGCTGGGAAACTCTCATGTTACTAACTTTGTTG
                                                                                                                                                                                           CTCTAACTCTGCCATCTTGGTTTCCCCATCCCTTCTTCTTCTTCTTCTTGTACGTGTGCTCTCT
                                                                                                                                                                                                                                      AATATTAGCGTTGGGTTGAGATTTTCAGTGGTCCAATATTCCTCTTCCTCTGGTTGCCTT
                                                                                                                                                                                                                                                    TCCTGAGATAATCCACTAAGAATATTTTGTGTTTTCTTTTCTCAGGGAATCTAAGGGAGGA
                                                                                                         TTCAGTTTAGTATACTCAAATCTTATTTTAGTGCTTGGGAAATCAATTCAGAATATCACA
                       GCTAGGTAGAGGTATGTCCTTTTATGTAATGGCCACCGCATTTAGTATTACATAAACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2684 CTTGGATTTATGTTCTGTATAAAAAAAAATAAATTTCTTATAAAACTC 2733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTIGGATTIAIGITCTGIAICTGIGAAAAAAAAATTICTIAIAAAACTC 2484
                                                                                                                                                                                                                                                                                                       2384
                                                                                                                                                                                                                                                                                                                                                                                            2504
                                                                                                                                                                                                                                                                                                                                                                                                                  2315
                                                                                                                                                                                                                                                                                                                                                                                                                                                          2375
                                             2024
                                                                                     2084
                                                                                                                                                                                               2015
                                                                                                                                                                                                                    2264
                                                                                                                                                                                                                                                            2324
                                                                                                                                                                                                                                                                                   2135
                                                                                                                                                                                                                                                                                                                             2195
                                                                                                                                                                                                                                                                                                                                                  2444
                                                                                                                                                                                                                                                                                                                                                                        2255
                                                                                                                                                                                                                                                                                                                                                                                                                                      2564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2435
                                                                1835
                                                                                                           1895
                                                                                                                                                     1955
                                                                                                                                                                                                                                        2075
   1964
                        1775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                 g(
                                                                                                                                                    8 8 8
                                                                                                                                                                                                              6 6 6 6 6 6
                                                                                                                                                                                                                                                                                                                                           8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                           8 B 8
                                                                                                                          g
                                                         à
                                                                                                           ઠ
                      ò
                                      d
```

```
Human; ss; differential expression; foam cell; LPS; lipopolysaccharide; cardiovascular disease; atherosclerosis.
                                                                                                             Human cDNA differentially expressed in foam cells #82.
                 ADE25678 standard; cDNA; 2741 BP
                                                                                                                                                                                                                                                                                               18-SEP-2002; 2002US-00247671.
                                                                                                                                                                                                                                                                                                                              19-SEP-2001; 2001US-0323784P.
                                                                                 (first entry)
                                                                                                                                                                                                                              US2003194721-A1.
                                                                                                                                                                                                 Homo sapiens.
                                                                                 29-JAN-2004
                                                                                                                                                                                                                                                               16-0CT-2003
ADE25678

XA ADE:
XX ADE:
XX ADE:
XX BHUM
XX HUM
XX HUM
XX HUM
XX CAT
XX CAT
XX CAT
XX XX CAT
XX XX CAT
YX XX CAT
YX YX US2
XX YX US2
XX XX YX US2
XX XX YX US2
XX XX YX US2
XX XX US3
XX XX US4
XX XX US7
XX XX US7
```

The invention relates to a combination comprising several polymucleotides calmodulin gene, human mRNA for KIAA030 protein, leukotriene A4

hydrolase, human mRNA for KIAA030 protein, leukotriene A4

hydrolase, human mRNA for KIAA030 protein, leukotriene A4

mRNA, etc., and their complements. The cDNAs are differentially expressed in LPS (lipopolyasccharide) rereated foam cells. Also included are obtaining an extended or full length gene from a library of nucleic acid sequences, an extended or full length gene from a library of nucleic acid sequences, an extended or full length gene from a library of nucleic acid sequences, an expression vector containing the nucleic acids a host cell composition comprising a protein by culturing the host cell, and a composition comprising a protein by culturing the host cell, and a composition comprising a protein by culturing the host cell, and a composition comprising a protein by culturing the host cell, and a composition comprision with a sample is from a subject with throughput detection of differential expression of one or more cor alterior and amonger from cell-expressed nucleic acids are useful for a high throughput screening of a library of molecules or compounds to identify a ligand which binds a polynucleotide. The library is chosen from the compounds to identify at least one ligand which specifically binds a compounds to identify at least one ligand which specifically binds a compounds to identify at least one ligand which specifically binds a cardiovascular disorder. The foam cell-expressed nucleic acids are useful for diagnosing rational assets one ligand which as earlied or detecting related confidence as elements on a microarray which can be used for detecting related confidence and protein a sample detection a sequence represent a cDNA whose expression compounds to in a sequence represents a cDNA whose expression compounds to incomplete the sequence represents a cDNA whose expression compounds to incompleted the sequence represents a cDNA whose expression compou Combination containing several polynucleotide that are differentially expressed in foam cells and complements of the polynucleotides, useful for diagnosing cardiovascular disease or atherosclerosis. is upregulated in LPS treated foam cells. Claim 1; SEQ ID NO 82; 37pp; English.

Query Match

54.7%; Score 1358; DB 9; Length 2741;
Best Local Similarity 99.9%; Pred. No. 5.6e-296;
Matches 1369; Conservative 0; Mismatches 0; Indels 1. Sequence 2741 BP; 841 A; 452 C; 530 G; 918 T; 0 U; 0 Other;

> à 셤 8 g ò

셤

ઠે g ò 셤 ઠે 셤

ò

```
2023
                                                                                                                                                                                                                2083
                                                                                                                                                                                                                                   1954
                                                                                                                                                                                                                                                                                                                   TCCTCTCCAAITCTCTCTTACTCAAATTGCTGGGAAACTCTCATGTTACTAACTTGTTG 2014
                                                                                                                                                                                                                                                                                                                                                          CICTAACICIGCCAICTIGGIIICCCCAICCCTICICTCCTCAIGGIACGIGIGCTCCT 2074
                                                                                                                                                                                                                                                                                                                                                                                                    2134
                                                                                                                                                                                                                                                                                                                                                                                                                                           2135 TCCTGAGATAATCCACTAAGAATATTTTGTGTTTCTTTTTCTCAGGGAATCTAAGGGAGGA 2194
2384 TCCTGAGATAATCCACTAAGAATATTTGTGTTTCTTTTCTCAGGGAATCTAAGGGAGGA 2443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1654
                                                                                                             1714
                                                                                                                                 1963
                                                                                                                                                    1774
                                                                                                                                                                                             1834
                                                                                                                                                                                                                                                                                      TICAGITIAGIATACTCAAATCTTATTTTAGTGCTTGGGAAATCAATTCAGAATATCACA 2203
                                                                                                                                                                                                                                                                                                                                                                                                             2324 AATATTAGGTTGGTTGAGATTTTCAGTGGTCCAATATTCCCTCTTCCCTCTGGTTGCCTT 2383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATTATCAACTGTGCACAAGGAAAAAATAGATATGTGAAAGGTTCACGTAAATTTCCTC 2254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2444 AATTATCAACTGTGCACAAGGAAAAAAAAGATATGTGAAAGGTTCACGTAAATTTCCTC 2503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2564 ACCAPAGGGATGTGTTTTATTAATGTCTAGGATGAAGAAATGCATAGAACATGTAGTAC 2623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2624 TIGTAAATAACTAGAAATAACATGATTTAGTCATAATTGTGAAAATAATAATAATTTT 2683
ACCAAAGGGATGTTTTTTTAATGTCTAGGATGAAGAATGCATAGAACATTGTAGTAC
                                                                                   TIGHT
                                                                                                                                                                                           GCTAGGTAGAGGTATGTCCTTTTATGTAATGGCCACCGCATTTAGTATTACATAAACTTT
                                                                                                                                                                                                          2024 GCTAGGTAGAGGTATGTCCTTTTATGTAATGGCCACCGCATTTAGTATTACATAAAACTTT
                                                                                                                                                                                                                                                                           TTCAGTTTAGTATACTCAAATCTTATTTTAGTGCTTGGGAAATCAATTCAGAATATCACA
                                                                                                                                                                                                                                                                                                                                                                                                    AATATTAGCGTTGGTTGAGATTTTCAGTGGTCCAATATTCCTCTTTCCCTCTGGTTGCCTT
                              AAATAATCCACCTCTGTCATTTCCACTCTGAACATCCCAAGCTGTATCCCTGGCCTCT
                                         AAATAATCCACCTCTGTCATTTCCACTCTGAACATCCCAAGCTGTATCCCTGGCCTCT
                                                                    TITCICAGACTAIGIITCIIIACIITACIITAGGACCIAGAACIIGGAIIGGGAIIGGCAIIIGICCI
                                                                                                                                                     TTGACTTGCCTTTTTGTTTCTTTCCTTCATCTTAGTCCCTCTTCATGCAGTATGGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTGGATTTATGTTCTGTATCTGGAAAAATAAATTTCTTATAAAACTC 2484
                                                  1784
                                                                                                              1655
                                                                                                                                 1904
                                                                                                                                                                         1964
                                                                                                                                                                                            1775
                                                                                                                                                                                                                                                                             1895
                                                                                                                                                                                                                                                                                                2144
                                                                                                                                                                                                                                                                                                                    1955
                                                                                                                                                                                                                                                                                                                                        2204
                                                                                                                                                                                                                                                                                                                                                           2015
                                                                                                                                                                                                                                                                                                                                                                                 2264
                                                                                                                                                                                                                                                                                                                                                                                                    2075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2435
                                                                    1595
                                                                                                                                                    1715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2684
                              1535
                                                                                                               ا
ا
ا
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 , 8
                                                                                   සු දු
                                                                                                                                              8 B 8
                                                                                                                                                                                                          6 8 6 8 6 8 6 8 6 8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 8 8
                                           8 B
                        ₹
```

AAS60823 standard; cDNA; 2527

RESULT 4
AAS60823
ID AAS6
XX
AC AAS6

AAS60823

```
The invention relates to 1046 novel nucleic acids which are used as markers for determining the sensitivity of a cancer cell to the anticancer agent TAXOL. Cancer cells can be treated with TAXOL when they care shown to express one of the 242 sensitivity markers or the cells are shown not to express one of the 804 resistance markers. The methods can be used to determine the effectiveness of TAXOL in the treatment of cancer cell growth in an individual. The markers can be used as targets in developing anti-cancer agents such as chemotherapeutic compounds. The markers can also be used as targets in developing treatments for cancer, particularly those cancers which display resistance to agents and exhibit expression of the markers. The anticancer agents developed by the novel method can be used to treat cancer. Probes based on the markers can be used to treat cancer. Probes based on the markers can be markers, in the identification of cells or tissues which mis-express the protein. Cancers which may be targeted include carcinoma (e.g. squamous cell carcinoma), sarcoma (e.g. fibrosarcoma) leukaemia (e.g. lymphocytic leukaemia), lymphoma, plasmocytoma, reticulum cell sarcoma, Hodgkin's disease and tumours (e.g. glioma). The present sequence is one of the
                                                                             Human; cancer cell marker; TAXOL; cytostatic; tumour; carcinoma; squamous cell carcinoma; sarcoma; fibrosarcoma; leukaemia; lymphocytic leukaemia; lymphoma; plasmocytoma; reticulum cell sarcoma; Hodgkin's disease; glioma; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1170 AGCTAGAGGAAGTCCCAAAGAAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1236 GACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTGAGCAAATAGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1116 AGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nucleic acid, used as a marker to determine the effectiveness TAXOL to treat cancer cell growth in individuals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match

49.7%; Score 1235.2; DB 4; Length 2527;
Best Local Similarity 98.6%; Pred. No. 2.6e-268;
Matches 1298; Conservative 0; Mismatches 14; Indels 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2527 BP; 742 A; 431 C; 513 G; 824 T; 0 U; 17 Other;
                                                                                                                                                                                                                                                                                                                                                                                              Van Huffel C;
                                                agent-sensitive marker #325.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 338-339; 527pp; English.
                                                                                                                                                                                                                                                                                                                                                                                              Bolt A,
                                                                                                                                                                                                                                                                                                                                                             (MILL-) MILLENNIUM PREDICTIVE
                                                                                                                                                                                                                                                                                                                        14-APR-2000; 2000US-0197538P.
                                                                                                                                                                                                                                                                                     13-APR-2001; 2001WO-US012132
               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                              Lillie J, Brown JL,
                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-602933/68
                                                                                                                                                                                                               W0200179556-A2.
             29-JAN-2002
                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                  25-OCT-2001,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel nusing
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ብ አ
```

```
2015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2195
                                                                                                                                                                                                                                                                                                                                                                                                1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2249
                                                                                                                                                                                                                                                1715
                                                                                                                                                                                                                                                                                                                                                 1835
                                                                                                                                                                                                                                                                                                                                                                        1889
                                                                                                                                                                                                                                                                                                                                                                                                                           1949
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATATTAGCGTTGAGARTTTTCAGTGGTCCAATATTCCTCTTCCTCTTGCTTT 2189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTATCAACTGTGCACAAGGAAAAAAAAAAAAGATATGTGAAAGGTTCAGGTAAATTTCCTCA 2309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A-CCAAAGGGATGTTTTTTTTATTAAT-GTCTAGGATGAAAATGCATA-GAACATTGTA- 2370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1475
                                                                                                                      1589
                                                                                                                                                1595
                                                                                                                                                                                                1655
                                                                                                                                                                                                                      1709
                                                                                                                                                                                                                                                                         1769
                                                                                                                                                                                                                                                                                                 1775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2255 2196 ATTATCAACTGTGCACAAGGAAAAAATAGATATGTGAAAGGTTCACGTAAATTTCCTCA 2255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATCACAGAAGATTAAAATTCAGAAAGGAGAAAACACAGACCAA -AGAGAAGTATCTAAG 2314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATCACAGAAGATTAAAATTCAGAAAGGAGAAAACACAGAGAGCAAGAGAAGTATCTAAG 2369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTACTTGTAAATAACTAGAAATAACATGATTTAGTCATAATTGTGAAAAATAATAAT 2427
             1410 TCTATTAAATACCTGGCAGCTCTCTCTCTTTTTGTGGGTTGTTGCCCTGTGATTAGTTCT
                                                                                                              GTTCATACTAGAGAATCTGCACTATGTTTTTCCCTTTTTGTCTTGAGATGAAAGTTTTAA
                                                                                                                                                                 AATAATCCACCTCTGTCATTTCCACTCTCTGAACATCCCAAGCTGTATTCCTGGCCTCTT
                                                                                                                                                                                                             TTCTCAGACTATGTTTCTTTACTTGGGACCTAGAACTGGATTGGATTAGCATTGCTCCTG
                                                                                                                                                                                                                                                                TGACTTGCTTTTTGTTTCTTTCCTTCATCTTAGTCCCTCTTCATGAGTATGGTCATTG
                                                                                                                                                                                                                                                                                                                                                                                                                   TTTTAACAATCTGTGCATAGTACATGCTGCTCTGTTCCATTTAGAGATTTGACAGAGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTAACTCTGCCATCTTGGTTTTCCCCATCCTTCTTCTTCTTCCTAGGTACGTGTGCTCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGAGATAATCCACTAAGAATATTTTGTGTTTTCTTTTTCTCAGGGAATCTAAGGGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTTCATACTAGAGAATCTGCACTATGTTTTTCCCTTTTTGTCTTGAGATGAAGTTTTAA
                                                                                                                                                                                                TTCTCAGACTATGTTTTCTTTACTTGGGACCTAGAACTGGATTGGATTGGCATTGCTCCTG
                                                                                                                                                                                                                                                                                                                                                 CTAGGTAGAGGTATGTCCTTTTATGTAATGGCCACCACTTTAGTATTACATAAACTTTC
                                                                                                                                                                                                                                                                                                                                                                 CTAGGTAGAGGTATGTCCTTTTATGTAATGGCCACCGCATTTAGTATTACATAAACTTTC
                                                                                                                                                                                                                                                                                                                                                                                                   TITIDACAATCIGIGCATAGIACAIGCIGCICTGIICCATITAGAGAITIGACAGAGGII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rcagititagitaracicaaarcifatititagigcifiggaaarcaaficagaatarcacar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTCTCCCAATTCTCTCTTACTCAAATTGCTGGGAAACTCTCATGTTACTAACTTTGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTAACTCTGCCATCTTGGTTTCCCCCATCCTTCTTCTTCCTCATGGTACGTGTGCTCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATATTAGCGTTGGTTGAGATTTTCAGTGGTCCAATATTCCTCCTTCCCTCTGGTTGCCTTT
                                                                                                                                                                                                                                                ATCAGATGAGACCTTTGATTATTTGCCCCTTCCTTAGGACCTTACACTCCTGTTTCTT
                                                1416 GCTTTTTAACCCACTCCCTGGATGCATTTTTCCCTCCTTGCATTTCCCTCTTTTTCCTGGA
                                                                      Gentritraacccactcccredargcartritricccrectrecartricccretrirecteda
                                                                                                                                                                                                                                                                                                                                                                        1830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2370
                                                                      1470
                                                                                                1476
                                                                                                                        1530
                                                                                                                                                                        1590
                                                                                                                                                                                                1596
                                                                                                                                                                                                                        1650
                                                                                                                                                                                                                                                1656
                                                                                                                                                                                                                                                                         1710
                                                                                                                                                                                                                                                                                                                         1770
                                                                                                                                                                                                                                                                                                                                                 1776
                                                                                                                                                                                                                                                                                                                                                                                                   1836
                                                                                                                                                                                                                                                                                                                                                                                                                           1890
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2371
                                                                                                                                                1536
                                                                                                                                                                                                                                                                                                 1716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2310
1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 8 8
                                                                                                              ğ
                                                                                                                                                                                                                                                                                      8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            के वि के
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                                                                              ò
                                                                                                                                                                  8 & 8
8
                                                                                                                                                                                                                                             à 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                g
                                                                                             ò
                 g
                                         õ
```

```
This invention relates to a combination comprising several CDNAs that are differentially expressed in activated vascular tissue. The invention also discloses a high throughput method for detecting differentially expressed contains of the companion may have antiateriosclerotic; cytostatic; cardiant; hypotensive; antidiabetic; cytostatic; cardiant; hypotensive; antidiabetic; cytostatic; cardiant; hypotensive; antidiabetic; cytostatic; cardiant; hypotensive; antidiabetic; cytostatic; cardiant; hypotensive; antidiabetic; used in gene therapy. The cDNAs of the invention may be used in a high-throughput methods for detecting differential expression of one or more converted in a molecule or compound that specifically binds a converted invention. A protein encoded by the cDNA may be used to screen several molecules or compounds to identify a ligand that specifically binds to the protein, or to produce or purify an antibody to the protein that can be used to detect a protein in a sample or purify a natural or recombinant protein from a sample. The nucleotides may be useful for canonial protein from a sample. The nucleotides may be useful of a vascular disease, e.g. atherosclerosis, cancer, coronary artery disease, hypertension, diabetes, pre-eclampsia, ischaemia- reperfusion of injury, restenosis, or stroke. The cDNAs can also be used for large-scale concluse, Antibodies to the proteins encoded by the cDNAs are useful for molecules. Antibodies to the proteins encoded by the cDNAs can also be used for large-scale associated with abnormalities in the expression, amount or distribution of the protein. The present sequence represents a cDNAs of the invention that is differentially expressed in activated vascular tissue. Note: The sequence data for this patent did not form part of the sequence data for this patent did not form part of the sequence data for this patent did not form part of the sequence data for this patent did not form part of the sequence date for this patent did not form part of the protein.
                                                                                                                                                                                                                       Human; gene; ss; vascular tissue; cytostatic; atherosclerosis; cardiant; hypotensive; antidiabetic; gynaecological; vasotropic; cerebroprotective; gene therapy; vascular disease; concer; coronary; artery disease; hypertension; diabetes; pre-eclampsia; restenosis; ischaemia-reperfusion injury; stroke.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Combination for diagnosing, staging, treating, or monitoring the progression of treatment of a vascular disease, e.g. atherosclerosis, comprises several cDNAs that are differentially expressed in activated
                                                                                                                                                                                   Human cDNA #519 differentially expressed in activated vascular tissue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2068 BP; 657 A; 338 C; 452 G; 621 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            http.segdata.uspto.gov/sequence.html?DocID=20020137081
                                              BP
                                              ABX63519 standard; cDNA; 2068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-JUL-2000; 2000US-0222469P. 08-JAN-2001; 2001US-0260483P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page; 18pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-JAN-2002; 2002US-00044090
                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-110597/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                              JS2002137081-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (BAND/) BANDMAN
                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-SEP-2002.
                                                                                                                                     26-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bandman O;
                                                                                            ABX63519;
AESULT 5
```

7; Length 2068;

Score 456.6; DB 7 Pred. No. 7.8e-93;

18.4%; 95.2%;

Similarity

Query Match Best Local

```
This sequence represents a human gene of the invention, that is induced to express by both HGW and interferon (IRN), designated HGW-inducible genes (cigo r cigs). The invention also relates to genes that are repressed in the presence of HGW infection, designated HGW-repressible genes (crg or crgs). The products can be used to obtain agents which can be used for anti-viral therapy, particularly anti-HGW therapy. They can also be used for the development of drugs that would allow for higher associated with administering high levels of IFN. The products can also be used for detection, diagnosis and drug screening
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human, antianaemic; vulnerary; antiinflammatory; immunomodulator;
antiinfertility; cerebroprotective; cytostatic; rheumatic; gene therapy;
neuroprotective; antiparkinsonian; protein therapy; BST;
expressed sequence tag; gene; se.
                                                                                                                                                                                                                                                                                                                                                                                       857 CAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1037 CTCATGTGGATAGGATGGATTTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1097 AGCCTGTGAGGTCCAAGCTAGAGAAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               801 AAATATTTTTGAATTAATATCTTGCTTTATGTCTACCTTACAGTTTAATCCCATGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                             GTGTGGCATTTGTATTTGATGCCAGCTCTATTCAATACTTCTCCTCTCAGATGATAGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                             917 GTGTGGCATTTGTATTTGATGCCGGCTCTATTCAATACTTCTCCTCTCAGATGATAGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      981 AGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGATCAAAAGAATTCAAAGGGAGTTGGTAAACGCTGGGTGGTGCTACATGTGGCTTTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCATGTGGATAGCATGGATTTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCTTTCTGCTCTGAGACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       861 CAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATT
                                                                                                                                                                                                                                       Query Match
18.3%; Score 455; DB 2; Length 1335;
Best Local Similarity 94.9%; Pred. No. 1.6e-92;
Matches 470; Conservative 0; Mismatches 25; Indels (
                                                                                                                                                                                                           Sequence 1335 BP; 409 A; 232 C; 311 G; 383 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel human coding sequence SEQ ID NO:
             2; Page 103-104; 184pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1281 TTGAGCAAATAGGTA 1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABN59995 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-JJN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABN59995;
                                                                                                                                                                                                                                                                                                                                                                                                                              921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABN59995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
ò
                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                       1160
                                                                                                                      1402
                                                                                                                                                                                  1462
                                                                                                                                                                                                                1040
                                                                                                                                                                                                                                             1522
                                                                                                                                                                                                                                                                                                        1582
                                                                                                                                                                                                                                                                                                                                                                                                 1220
                                                                                                                                                                                                                                                                                                                                                                                                                      1643 TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAA 1702
                                                                                                                                                                                                                                                                         CTCATGTGGATAGCATGGATTTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGTG 1100
                                                                                                                                                                                                                                                                                                                                                                  AGCCTGTGAGGTCCAAGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA 1642
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TICITICERCCICIGAGACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTT 1280
                                                           980
                                                                                        920
                                                                                                                                                                                                                                   CTCATGTGGATAGCATGGATTTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGTG
                                                                                                                                                                                                                                                                                                                                      AGCCTGTGAGGTCCAAGCTAGAAGAAGACCCAAAGAAAACTTGGATTTGCTCTTTCTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCTTTCTGCTCTGAGACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTT
                                                                                                            CAATCAAATTAAAATCAACATGACTACATTGATTCCCCAATCGCTGAAGGACAGAAATTCATT
                                                                                                                                                     GIGIGGCATTIGIATTIGAIGCCAGCICIATICAAIACITCICCICICAGAIGAIAA
                                                                                                                                                                                 1403 GIGIGGCATITIGIATITIGATGCCAGCICTATICAATACTICTCCCTCTCAGATGATAGTAA
                                                                                                                                                                                                                AGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                    TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAA
                                                                                          CAATCAAATTAAATCATCATGACTACATTGATTCCCCCATCGCTGAAGGACAGAATTCATT
                               801 AAATATTTTTGAATTAATATCTTGCTTTATGTCTACCTTACAGTTTAATCCCATGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HCMV inducible gene; cig; human; human cytomegalovirus; interferon; anti-viral therapy; anti-HCMV therapy; detection; diagnosis; drug screening; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New isolated human genes to obtain agents for antiviral therapy, particularly anti-HCMV therapy.
 ô
 Indels
 24;
 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human HCMV inducible gene, SEQ ID NO 9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВР
 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGAGCAAATAGGTA 1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Treaccaatacea 1777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98WO-US018638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-0058180P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard; DNA; 1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JUN-1999 (first entry)
 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cong J, Schenk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYPR-) UNIV PRINCETON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-243729/20.
P-PSDB; AAY05371.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WC9913075-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-SEP-1997;
22-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-MAR-1999
Matches 471;
                                                                                                                                                                                                                                                                                                        1523
                                                                                                                                                                                                                                                                                                                                       1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1703
                                                                                                                                                                                                                                                                            1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX33941;
                                                                                                                                                                                                                                                                                                                                                                      1583
                                                                                                                                                                                                                                                                                                                                                                                                    1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX33941
                                                                                                                       1343
                                                                                                                                                     921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zhu H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                           ઠ
                                                  g
                                                                                                               셤
                                                                                                                                            ò
                                                                                                                                                                            셤
                                                                                                                                                                                                       ò
                                                                                      \delta
```

1040

916 980 976

Gaps

ö

1036

1160

1096

œ

```
Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 861 (
                                                                                             AAN61259;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local (
                                               RESULT 8
                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ્ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TICTITICITECTCTGAGACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTT 1280
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGTGGCATTTGTATTTGATGCCAGCTCTATTCAATACTTCTCCTCTCAGATGATAGTAA 1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGATCAAAAGAATTCAAAGGGAGTTGGTAAACGCTGGTGGTACATGTGGCTTTGCTCA 1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCATGTGGATAGCATGGATTTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGTG 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCCTGTGAGGTCCAAGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA 1160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCCTGTGAGGTCCAAGCTAGAGGAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA 1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TICITICIGCICIGAGACGAAIGCIAIGGCIGCAGAIGACTICTIAGAGGAITIGCCIT 1342
                                                                                                                                                                                                                                                         The present invention provides the protein and coding sequences of 444 covel human proteins. These were isolated from expressed sequences tags (ESTs). They can be used to stimulate cell growth, to regulate haematopoiesis e.g. to treat aplastic anaemia, to help tissue regrowth e.g. in burn treatment to regulate the immune system e.g. to treat multiple solatosis, to regulate activity or inhibin e.g. to treat infertility, to regulate haemostasis or thrombolysis e.g. to treat tinfaminatory conditions e.g. rheumatoid arthritis, and to treat nervous system disorders e.g. Parkingon's disease. The present sequence is a coding sequence of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACATATTCTATATCTTGAACGGTAACATTCGTGATAGGATACCAGTTTAATCCCATGGAAT 922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GIGIGGCATTIGIATTIGAIGCCAGCICIATICAATACTICICCICICAGAIGATAGTAA 980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          801 AAATATTTTTGAATTAATATCTTGCTTTATGTCTACCTTACAGTTTAATCCCATGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAATCAAATTAAATCATCATGACTACATTGATTCCCCCATCGCTGAAGGACAGAATTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGATCAAAAGAATTCGAAGGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rcrcccrcraccaarrarrccrcrcacrcccccrcccccrcrcraaccarcraa
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                An isolated polymucleotide for treating diseases associated with its encoded polypeptide such as cancer and multiple sclerosis.
                                                                                                                                Ren F;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ÷
                                                                                                                                                                                                                                                                                                                                                                                                                          Score 455; DB 6; Length 1679;
Pred. No. 1.7e-92;
0; Mismatches 25; Indels
                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1679 BP; 554 A; 275 C; 373 G; 477 T; 0 U; 0 Other;
                                                                                                                               Zhang J, Zhao QA,
RT;
                                                                                                                                                                                                                                     Claim 1, SEÓ ID NO 406, 509pp, English.
                                                                                                                            Tang YT, Liu C, Zhou P, Asundi V,
Xue AJ, Yang Y, Wehrman T, Drmanac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGAGCAAATAGGTA 1295
                                                         10-SEP-2001; 2001WO-US026015.
                                                                                 11-SEP-2000; 2000US-00659671
                                                                                                                                                                                                                                                                                                                                                                                                                            18.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                              WPI; 2002-292408/33.
P-PSDB; ABB97582.
                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 470; Conserv
                                                                                                        (HYSE-) HYSEQ INC
            WO200222660-A2
                                    21-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1221
  임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                යු දු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
```

```
AGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTGCTCA 1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The antigenic protein encoded by this sequence can be produced with low cost on a large scale using recombinant DNA methods. It is used for in vitro diagnosis of non-B hepatitis. This DNA sequence can be used as a probe in hybridisation assays, detecting an infecton by the virus. Sea also AANB1260. (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PR field.) (Ipdated pI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                recombinant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         801 AAATATTTTTGAATTAATATCTTGCTTTATGTCTACCTTACAGTTTAATCCCATGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      857 CAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GIGIGGCATTIGIATTIGATGCCAGCTCTATTCAATACTTCTCCTCTCAGATGATAGTAA
                                                                                                                                                                 Sequence encoding antigenic protein specific to non-A non-B hepatitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ż
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 448.6; DB 1; Length 1332;
Pred. No. 4.4e-91;
0; Mismatches 29; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Non-A non-B hepatitis-specific antigenic protein - obtd. by re
DNA techniques from liver infected with non-A non-B hepatitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kitamura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1332 BP; 408 A; 230 C; 314 G; 380 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nakaanishi S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Teranishi Y,
                                                                                                                                                                                                                                                                                                      Location/Qualifiers
1. .1332
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure, Page ?; 33pp; English.
ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MITU ) MITSUBISHI CHEM IND LID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 87JP-00078313.
87JP-00140586.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  87JP-00283990.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18.18;
94.18;
  AAN81259 standard; DNA; 1332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      88EP-00400790
                                                                                            (revised)
(first entry)
                                                                                                                                                                                                                 Non-A non-B hepatitis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 94.1
Matches 466; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matsui R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1988-339815/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     P-PSDB; AAP80669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kamizono M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAR-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAR-1987;
                                                                                            25-MAR-2003
24-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-NOV-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-NOV-1988
                                                                                                                                                                                                                                                                                                                                                                                                          EP293274-A.
```

```
ABL80943 standard; cDNA; 482 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-MAY-2001; 2001WO-US017756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-MAY-2000; 2000US-0207484P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Algate PA, Harlocker SL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATAAT 1541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-122075/16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       562 AATAAT 567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CORI-) CORIXA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200192581-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                        382
                                                                                                                                                                                                                                                                                               1296
                                                                                                                                                                                                                                                                                                                                               1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABL80943;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABL80943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                               음
                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
88888888
                                                                                                                                                ઠે
                                                                                                                                                                  셤
                                                                                                                                                                                              ठे
                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                   ď
                                                                                                                                                                                                                                                                                                                                        ⋧
                                                                       1160
                                                                                                                       1220
                                                                                                                                                                      1096
                                                                                                                                                                                     The invention relates to 1046 novel nucleic acids which are used as markers for determining the sensitivity of a cancer cell to the anticancer agent TAXOL. Cancer cells can be treated with TAXOL when they are shown to express one of the 242 sensitivity markers or the cells are shown not to express one of the 804 resistance markers. The methods can cancer cell growth in an individual. The markers can be used as targets in developing anti-cancer agents such as chemotherapeutic compounds in developing anti-cancer agents such as chemotherapeutic compounds in developing anti-cancer agents such as chemotherapeutic compounds the markers can also be used as targets in developing treatments for cancer, particularly those cancers which display resistance to agents and exhibit expression of the markers. The anticancer agents developed by the novel used to detect transcripts or genomic sequences corresponding to the markers, in the identification of cells or tissues which mis-express the
                                                                                               1097 recercicidadenceaaderadadadadeeaaadiceaaadaaaadirecarirecerricidada 1156
                                                                                                                                             1157 rcrcegregriageaarrarrccrcreagregeaecregaeccreraaagargricraa 1216
AGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTGCTCA 1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel nucleic acid, used as a marker to determine the effectiveness of using TAXOL to treat cancer cell growth in individuals:
                                                                                                                                                                                                                                                                                                                                                                                                             Human; cancer cell marker; TAXOL; cytostatic; tumour; carcinoma;
squamous cell carcinoma; sarcoma; fibrosarcoma; leukaemia;
lymphocytic leukaemia; lymphoma; plasmocytoma; reticulum cell sarcoma;
                                      1101 AGCCTGTGAGGTCCAAGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGGTCTTTGTGACA
                                                                                                                        TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAA
                         CTCATGTGGATAGCATGTTACAAAAGGTGACCTTATAGAAATAGAGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Van Huffel C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                      Human cancer agent-sensitive marker #138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 211; 527pp; English.
                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                         lymphocytic leukaemia; lymphon
Hodgkin's disease; glioma; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bolt A,
                                                                                                                                                                                                                         TTGAGCAAATAGGTA 1295
                                                                                                                                                                                                                                                 Trgagcaaaraggga 1291
                                                                                                                                                                                                                                                                                                               .AAS60407 standard; cDNA; 567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-APR-2001; 2001WO-US012132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-APR-2000; 2000US-0197538P
                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Brown JL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-602933/68.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200179556-A2.
                                                                                                                                                                                                                                                                                                                                                              29-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lillie J,
 776
                                                                                                                                                                         1221
                                                                                                                                                                                                1217
                                                                                                                                                                                                                          1281
                                                                                                                                                                                                                                                  1277
                                                1037
                                                                                                                         1161
                                                                                                                                                                                                                                                                                                                                       AAS60407
                          1041
                                                                                                                                                                                                                                                                                                  AAS60407
                                                                                                                                                                                                                                                                                       RESULT
                                                                                                                                                                                                                                                                                                                 d
                                                                                                                         8 8
                                                                                                                                                                      \delta
                                                                                                                                                                                             셤
                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                             셤
                                               d
                                                                Š
                       ઠે
```

```
1535
                                                                                                                                                                                                                                                                                                           1175
                                                                                                                                                                                                                                                                                                                                                                                                           1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1475
                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       501
                                                                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    561
                                                                                                                                                                                                                                                                                                                                                          201
protein. Cancers which may be targeted include carcinoma (e.g. squamous cell carcinoma), sarcoma (e.g. fibrosarcoma) leukaemia (e.g. lymphocytic leukaemia), lymphoma, plasmocytoma, reticulum cell sarcoma, Hodgkin's disease and tumours (e.g. glioma). The present sequence is one of the 1046 novel cancer cell markers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1476 GITCATACTAGAGAATCTGCACTATGTTTTCCCTTTTTGTCTTGAGATGAAAGTTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           262 gacgaariechariegegeriegagarieachterragaggaritriechtrirgagcaaaragera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      322 GATGGTTTGGTGTGTGGAAGCTTTGGAAGCGGTCAGGTAGTTGGCTACTTTCTGCTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1416 GCTITITAACCCACTCCCTGGATGCATTTTTCCCTCCTTGCATTTCCCTCTTTTCCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATGGTTTGGTGGTGGGAAGCTTGGAAGCGGTCAGGTAGTTGGCTACTTTCTGCTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTATTAAATACCTGGCAGCTCTCTGTCTTTTTGTGGGTTGTTGCCCTGTGATTAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rcrattaaaraccreecaccrererererrinnereserrerecerereatiadric
                                                                                                                                                                                                                                                                                                                                                                                                                                             1236 GACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTTGAGCAAATAGGTA
                                                                                                                                                                                                                                                                                                           1116 AGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCA
                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                              1176 ATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAATTCTGC
                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                        Query Match
16.7%; Score 415.4; DB 4; Length 567;
Best Local Similarity 98.4%; Pred. No. 1e-83;
Matches 419; Conservative 0; Mismatches 7; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88
                                                                                                                                                                 Sequence 567 BP; 128 A; 102 C; 116 G; 220 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; ovarian cancer; ovarian tumour; cytostatic; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human ovarian cancer related cDNA clone SEQ ID NO:3921.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jones
```

Composition for therapy and diagnosis of ovarian cancer comprising polypeptide of a ovarian tumor polypeptide, polymuclectide encoding polypeptide, antibody specific to polypeptide or I cell expressing polypeptide.

Claim 1; SEQ ID NO 3921; 489pp; English.

The present invention describes a composition (I) comprising: carriers and immunostimulants; and a polypeptide (III) of a ovarian tumour polypeptide encoded by a polymucleotide (III) having a copy agequence (S1) from the 10912 nucleotide sequences as given in ABL77023 to ABL87934, cfrom the 10912 nucleotide sequences as given in ABL77023 to ABL87934, cor antigen presenting cells that express (II), a T cell population of (II), cor antigen presenting cells that express (II). (I) has cytostatic cativity. An oligonucleotide (IV) that hybridises to (S1) can be used for activity. An oligonucleotide (IV) that hybridises to (S1) can be used for serum or ovarian tissue. The method comprises contacting a biological cample from a patient with (IV), detecting the amount of polymucleotide hybridising the amount to a predetermined cutoff value and thereby detecting ovarian camcer in the patient, where the amount of polymucleotide hybridising to (IV) is detected preferably by polymerase chain reaction (PCR). (I) comprising (III) and/or (III) is tumour protein comprising contacting T cells specific for an ovarian cutomour protein comprising contacting T cells with (III) or (III) is useful in design and preparation of riboxyme molecules for inhibiting contacting in tumour cells; and to isolate a full length gene from a suitable library e.g., a tumour cells; and

Sequence 482 BP; 104 A; 90 C; 103 G; 185 T; 0 U; 0 Other;

GCTTTTTAACCCACTCCTGGATGCATTTTTCCCTCTTGCATTTCCCTCTTTTCCTGGA 1475 GACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTGAGGAAATAGGTA 1295 1116 AGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCA 1175 GATGGTTTGGTGGTGTGGAAGCTTGGAAGCGGTCAGGTAGTTGGCTACTTTCTGCTTGGA 1355 TCTATTARATACCTGGCAGCTCTCTGTGTTGTGGGGTTGTTGCCCTGTGATTAGTTCT 1415 235 GACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTGAGCAAATAGGTA 294 414 115 AGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCA 174 234 175 ATTATTCCTCTGAGTGGGAGCTGGAACCCTGTAAAGGATGTTCTAATTCTTCTGCTCTGA TCTATTAAATACCTGGCAGCTCTCTGTCTTTTTGTGGGTTGTTGCCCTGTGATTAGTTCT Gaps ; 0 Similarity 100.0%; Pred. No. 4.7e-73; Conservative 0; Mismatches 0; Indels GTTCATAC 1483 GTTCATAC 482 Matches 368; 1416 1236 295 1356 1476 1296 355 415 475 Query Match Local g 엄 g a 8 셤 ð ઠ q ð ઠ à

Human cDNA #520 differentially expressed in activated vascular tissue.

(first entry)

26-FEB-2003

KEXEXEXEX

ABX63520;

ABX63520 standard; cDNA; 2515 BP

ABX63520

This invention relates to a combination comprising several CDNAs that are differentially expressed in activated vascular tissue. The invention also discloses a high throughput method for detecting differentially expressed considerations and in a sample. The CDNAs of the invention may have consideration of the invention may have antiatteriosalerotic; cytostatic; cardiant; hypotensive; antidiabetic; cytostatic; cytostatic, ardiant; hypotensive; antidiabetic; cytostatic ordered considerations and cerebroprotective activities and may be used in gene therapy. The CDNAs of the invention may be used in a high-throughput methods for detecting differential expression of one or more companies, or screening several molecules or compounds to identify a molecule or compound that specifically binds to consider the protein or to produce or purify a ligand that specifically binds to content or the protein or to produce or purify a ligand that specifically binds to content of a vascular disease, e.g. monitoring the progression of treatment of a vascular disease, e.g. atheroscalerosis, cancer, coronary artery disease, hypertension, diabetes, pre-eclampsia, ischaemia- reperfusion in july, restenosis, or stroke. The cDNAs can also be used for large-scale conjugation analysis of several new mucleic acid molecules. Antibodies to the proteins encoded by the cDNAs can content or distribution of the protein. The present sequence represents a cDNA of the invention that content that is differentially expressed in activated vascular tissue. Note: The cyas obtained in electronic format directly from USPTO at the protein of the 1235 2247 Human, gene; se; vascular tissue; cytostatic; atherosclerosis; cardiant; hypotensive; antidiabetic; gynaecological; vasotropic; cerebroprotective; gene therapy; vascular disease; cancer; coronary; artery disease; hypertension; diabetes; pre-eclampsia; restenosis; ischaemia-reperfusion injury; stroke. Combination for diagnosing, staging, treating, or monitoring the progression of treatment of a vascular disease, e.g. atherosclerosis, comprises several cDNAs that are differentially expressed in activated 1116 AGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCA 2128 AGCTAGAGGAAGTCCCAAAGAAACTIGGATTIGCTCTTICTGACAICTCGGTGGTTAGGA 1176 ATTATICCICTGAGTGGGAGCTGGACCCTGTAAAGGATGTICTAATTCTTTTTGTGCTCTGA 2188 ATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAATTCTTCTGCTCTGA 3; Gaps Length 2515; Sequence 2515 BP; 747 A; 430 C; 538 G; 800 T; 0 U; 0 Other; Query Match
Best Local Similarity 99.2%; Pred. No. 1.1e-69;
Matches 387; Conservative 0; Mismatches 0, Indels 2000US-0222469P. 2001US-0260483P. Claim 1; Page; 18pp; English. 08-JAN-2002; 2002US-00044090 WPI; 2003-110597/10. ö (BAND/) BANDMAN vascular tissue. US2002137081-A1 28-JUL-2000; 08-JAN-2001; sapiens 26-SEP-2002. Bandman O; Нопо ઠ 셤 8 8

us-10-051-835-18.rng

leukaemia), lymphoma, plasmocytoma, reticulum cell sarcoma, Hodgkin's disease and tumours (e.g. glioma). The present sequence is one of the 1046 novel cancer cell markers

Gaps

4,

Query Match
Best Local Similarity 96.4%; Pred. No. 9.8e-65;
Matches 380; Conservative 0; Mismatches 10; Indels 4;

2427

1414

Sequence 580 BP; 125 A; 111 C; 130 G; 212 T; 0 U; 2 Other;

ន្តដូច្ច

2307

The invention relates to 1046 novel nucleic acids which are used as markers for determining the sensitivity of a cancer cell to the anticancer agent TAXOL. Cancer cells can be treated with TAXOL when they are shown to express one of the 242 sensitivity markers or the cells are shown not to express one of the 804 resistance markers. The methods can be used to determine the effectiveness of TAXOL in the treatment of cancer cell growth in an individual. The markers can be used as targets in developing anti-cancer agents such as chemotherapeutic compounds. The markers can also be used as targets in developing treatments for cancer, particularly those cancers which display resistance to agents and exhibit expression of the markers. The anticancer agents developed by the novel method can be used to treat cancer. Probes based on the markers can be used to detect transcripts or genomic sequences corresponding to the used to detect transcripts or genomic sequences corresponding to the used to detect transcripts or genomic sequences corresponding to the protein. Cancers which may be targeted include carcinoma (e.g. squamous cell carcinoma), sarcoma (e.g. fibrosarcoma) leukaemia (e.g. lymphocytic 1415 TGCTTTTTAACCCACTCCTGGATGCATTTCCCTCCTTGCATTTCCTCTTTTTCTGG 1474
2428 TGCTTTTTAACCCACTCCTGGATGCA-TTTTCCTCCTTGCA-TTCCCTCTTTTCCTGG 2485 GAIG-GITIGGIGGIGGIAGAAGCIIGGAAGCGICAGGIAGIAGCIACITICIGCIIGG 1354 GACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTGAGCAAATAGGTA 1295 Human; cancer cell marker; TAXOL; cytostatic; tumour; carcinoma; squamous cell carcinoma; sarcoma; fibrosarcoma; leukaemia; lymphocytic leukaemia; lymphoma; plasmocytoma; reticulum cell sarcoma; Hodgkin's disease; glioma; ss. Novel nucleic acid, used as a marker to determine the effectiveness of using TAXOL to treat cancer cell growth in individuals. 2368 ATCTATTAAATACCTGGCAGCTCTTTTTTTTTGTGGGGTTGTTGCCTGTGATTAGTTC GACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTGAGCAAATAGGTA 1355 ATCTATTAAATACCTGGCAGCTCTCTGTCTTTTTGTGGGTTGTTGCCCTGTGATTAGTTC 1475 AGTICATACTAGAGARICIGCACTAIGTIT 1504
2486 AGTICATACTAGAGAATCIGCACTAIGTIT 2515 Van Huffel C; (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC. Human cancer agent-sensitive marker #101 Claim 1; Page 119; 527pp; English. BP. Bolt A, 13-APR-2001; 2001WO-US012132. AAS60100 standard; cDNA; 580 14-APR-2000; 2000US-0197538P 29-JAN-2002 (first entry) Lillie J, Brown JL, WPI; 2001-602933/68. WO200179556-A2. Homo sapiens 25-0CT-2001 AAS60100; 1296 2308 1236 2248 RESULT 12
AAS60100
XXX
XXX
AAS60100
XXX
XXX
XXX
Human
XXX
Human
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XXX
Homo
XX
Homo
XXX
Homo
XX
Homo
XX
Homo
XX
Homo
XX
Homo
XX
Homo
XX
Homo
XX
Homo
XX
Homo
XX
Ho ò 셤 g ઠે g à 셤 ద ð ઠે

1480 1302 1421 1242 1361 546 427 486 247 307 367 Nucleic acids encoding 4277 human colon cancer-associated polypeptides, useful for preventing, diagnosing and/or treating colorectal cancers. 1123 GGAAGTCCAAAGAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCAATTATTC 1362 AAATACCTGGCAGCTCTCTGTCTGTGGGGTTGTTGCCCTGTGGTTAGTTCTGCTTTT 188 GGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCAATTATTC 1303 TGGTGGTGT-GGAAGCTTGGAAGCGGTCAGGTAGTTGGCTACTTTCTGCTTGGATCTATT 428 AAATACCTGGCAGCTCTCTGTC TITTGTGGGTTGTTGCCCTGTGAATAGTTCTGCTTTT 1243 GCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTGAGCAAATAGGTAGATGGTT Human, colon cancer, colon cancer antigen, diagnosis, detection, colorectal carcinoma, chromosome 1, 88. Human colon cancer antigen encoding cDNA SEQ ID NO:1550. 1481 TACT-AGAGAATCTGCACTATGTTTTTCCCTTTT 1513
547 TACTAANAGAATCTGCACTAATGGTTTTCCCTTT 580 Š Rosen Birse CE, 99US-0157137P. 99US-0163280P. 28-SEP-2000; 2000WO-US026524. AAH34468 standard; cDNA; 977 (HUMA-) HUMAN GENOME SCI INC 03-SEP-2001 (first entry) Barash SC, WPI; 2001-235357/24. P-PSDB; AAG75063. WO200122920-A2. 29-SEP-1999; 03-NOV-1999; Homo sapiens 05-APR-2001 Ruben SM, AAH34468; RESULT 13
AAH13468
ID AAH13468
XX
AC AAH13
XX
DIT 03-S
XX
DIT 03-S
XX
DIT 03-S
XX
DIT 03-S
XX
PN WO2(
XX
PN WO2(
XX
PN WO2(
XX
PN WO2(
XX
PN WO2(
XX
PN WO2(
XX
PN WO1
PN WO1
PN WO1
PN WO1
PN WO1
PN WO1
PN WO1
PN WO1
PN WO1
PN WO1
PN WO1
PN WO1
PN WO1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN WD1
PN δ ď g 셤 g δ g ద ઠે g ሯ ò ઠ ઠ

```
Concer-associated nucleic acid molecules (N) and proteins (P), where the proteins are collectively known as colon cancer antigens. The colon cancer antigens have cytostatic activity and can be used in gene therapy and vaccine production. N and P may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate P expression. For example, N and P may be used to treat disorders associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of P by expressing inactive proteins or to supplement the patients own production of P. Additionally, N may be used to produce the colon cancer-associated Ps, by inserting the nucleic acids into a host cell and culturing the cell to express the proteins. N and F can be used in the prevention, diagnosis and treatment of colorectal carcinomas and cancers. AAH37196 to AAH37204 and AAB37789 represent sequences used in the exemplification of the present invention. N.B. Pages 666 to 682 and page 7053 of the sequence listing were missing at time of publication, meaning no sequences are present for SEQ ID NO:1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CIGIAAAGGAIGIICIAAIICIITIICIGCICIGAGACGAAIGCIAIGGGCIGCAGAIGACT 1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACATGTGGCTTTGCTCACTCATGTGGATAGCATTTGATTACAAAAGGTGACCTTA 1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATTIGCTCTTTCTGACATCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACC 1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Neuroprotective; cytostatic; dermatological; immunosuppressive; tumour; antiinflammatory; anti-HIV; antibacterial; antiinflammatory; cancer; immune system disorder; rheumatoid arthritis; inflammatory condition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            202 AGATTCCACCTÁGAAANGGGGAAAGCTNTTTCCNGGGAACACCÁTTTATACCCCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          318 CCTCTCAGATGATAGTAAAGATCAAAAGNATTCGAAGGAGTTGGTAAACGCTGGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTITAATCCCATGGAATCAATTAAATCATCATGACTACATTGATTCCCCATCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGAAGGACAGAATTCATTGTGTGGCATTTGTATTTGATGCCAGCTCTATTCAATACTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTCTCAGATGATAAAGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        378 hacardracerriscricacreardracaracaracarrirrgarracaaaaggracera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAGAAATAGAGAGATGTGAGCCTGTGAGGTCCAAGCTAGAGGAAGTCCAAAGAAACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAGAAATAGAGAGATGTGAGCCTGTGAGGTCCAAGCTAGAGGAAGTCCAAAGAAACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATTTGCTCTTTCTGACATCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGTAAAGGATGTTCTAATTCTTTCTGCTCTGAGACGAATGCTATGGGCTGCAGATGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cDNA encoding novel signal transduction pathway protein, Seg ID 266.
                                                                            AAH32943 to AAH37195 and AAG73514 to AAG77788 represent human colon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12.7%; Score 315.4; DB 4; Length 977; 82.1%; Pred. No. 4.2e-61; ive 1; Mismatches 76; Indels 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 977 BP; 353 A; 158 C; 202 G; 259 T; 0 U; 5 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTTAGAGGATTTGCCTTTTGAGCAAATAGGTA 1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rcrradaggarrrgccrrrrgaggaaaraggga 650
Claim 1; Page 3193-3194; 9803pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAS27231 standard; cDNA; 3276 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 82.1
hes 372; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAS27231;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
\overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times} \overset{\mathsf{M}}{\times
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ġ
```

```
Was cross, reample and research infection, infection, pagarities () blood disorder; and considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of the considered of
```

```
2000US-023627P-
2000US-0236370P-
2000US-0236370P-
2000US-0236370P-
2000US-0236370P-
2000US-0236370P-
2000US-0237034P-
2000US-0237034P-
2000US-0237034P-
2000US-0237034P-
2000US-0237034P-
2000US-024128P-
2000US-024128P-
2000US-024138P-
2000US-024138P-
2000US-024138P-
2000US-024138P-
2000US-024138P-
2000US-024138P-
2000US-024138P-
2000US-024138P-
2000US-024138P-
2000US-024637P-
2000US-024637P-
2000US-024637P-
2000US-024637P-
2000US-024637P-
2000US-024633P-
2000US-024633P-
2000US-024633P-
2000US-024633P-
2000US-024633P-
2000US-024633P-
2000US-024633P-
2000US-024633P-
2000US-024633P-
2000US-024633P-
2000US-024633P-
2000US-024633P-
                                                                                                                                                                                                                                                                                                                                                                                                    2000US 0249210P
2000US 0249211P
2000US 0249211P
2000US 0249213P
2000US 0249214P
2000US 0249215P
2000US 0249215P
2000US 0249215P
2000US 0249214P
2000US 0249244P
2000US 0249244P
2000US 0249244P
2000US 0249244P
2000US 0249244P
2000US 0249244P
2000US 0249244P
2000US 0249244P
2000US 0249244P
                                                                                                                                                                                                                                                                              08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
08-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                     17-NOV-2000;
17-NOV-2000;
17-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                       08-NOV-2000;
17-NOV-2000;
17-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                             17-NOV-2000;
17-NOV-2000;
17-NOV-2000;
```

```
The invention relates to novel isolated polypeptides (I), and

The invention relates to novel isolated polypeptides (I) are useful for

polyuclectides (II). (I), (II) and the antibody to (I) are useful for

disorders (e.g. congenital and acquired immunodeficiencies, autoimmune

disorders (e.g. rhematoid arthritis), inflammatory conditions, organ

transplant rejections and graft versus host disease, infectious diseases

CC (e.g. hepatitis C), bleeding disorders, haemoglobin abnormalities and

char blood-related disorders (sickle cell anaemia), myeloproliferative

co ther blood-related disorders (sickle cell anaemia), myeloproliferative

co disorders, primary haematopoietic disorders, hyperproliferative disorders

CC (e.g. qaucher's disease, Parkinson's disease), chromosomal abnormalities

CC Alzheimer's disease, Parkinson's disease), chromosomal abnormalities

CC Alzheimer's disease, parkinson's disease), chromosomal disorders (e.g. arrhythmia),

crepiratory disorders, dermatological disorders (e.g. arrhythmia),

crepiratory disorders, dermatological disorders (e.g. Addison's

CC (inflammatory disorders), liver disorders (cirrhosis), as stimulators of

chigher affinity antibodies, and as a means to induce tumour proliferation

chigher affinity antibodies, and as a means to induce tumour proliferation

chigher affinity antibodies, and as a means to induce tumour proliferation

chigher affinity antibodies, and as a means to induce tumour proliferation

chigher affinity antibodies, and as a means to induce tumour poliferation

chigher affinity antibodies, and as a means to induce (mount pathologies e.g. acquired immune deficiency syndrome (AIDS). AASS6976-

AASZ7850 represent novel signal transduction pathway protein coding
                                                                                                                                                                                                                                                                                                                                                                                Novel polypeptides useful for diagnosing, treating, preventing and/or prognosing disorders related to the proteins, including cancers, immune disorders and neuronal disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 266; 880pp; English
08-DEC-2000; 2000US-0251868P.
08-DEC-2000; 2000US-0251869P.
08-DEC-2000; 2000US-0251989P.
08-DEC-2000; 2000US-0251990P.
11-DEC-2000; 2000US-0254097P.
05-JAN-2001; 2001US-025407P.
                                                                                                                                                                                              (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                               Ruben
                                                                                                                                                                                                                                               Barash SC,
                                                                                                                                                                                                                                                                                                    WPI; 2001-465460/50.
P-PSDB; AAU17314.
                                                                                                                                                                                                                                               Rosen CA,
```

2923 CTTAGAGGATTTGCCTTTTGAGCAAATAGGGAATTCTAAGGGAGGAAATTATCAACTGTGC 2982 3162 2150 CTAAGAATATTTTGTGTTTTCTTTTCTCAGGGAATCTAAGGGAGGAATTATCAACTGTGC AAAATTCAGAAAAGGAGAAAACACAGACCAAAGAAGTATCTAAGACCAAAGGGATGTGT TITATIAATGICTAGGATGAAGAAATGCATAGAACATIGTAGTACTTGTAAATAACTAGA ö 12.5%; Score 311; DB 4; Length 3276; 95.5%; Pred. No. 6e-60; ative 0; Mismatches 15; Indels Best Local Similarity 95.5 Matches 320; Conservative 2270 3043 2330 3103 2390 3163 Query Match ઠે 셤 8 6 8 6 8 6 8 ò

TGTATCTGTGAAAAATAAATTTCTTATAAAACTC 2484

08-DEC-2000; 2000US-0251869P

```
ss; gene; human; autoimmune disease; Parkinson's disease; silicosis; gastrointestinal disease; atherosclerosis; haemophilia; thrombocytopenia; fimunosuppressive agent; adjuvant; enhance immune response; higher affinity antibody induction; increased serum immunoglobulin concentration.
                                               Human cDNA encoding a novel protein #256.
           ADB93409 standard; cDNA; 3276 BP
                                                                                                                                                         2000US-0214886P.
2000US-0216647P.
2000US-0216880P.
                                                                                                                                 17-JAN-2001; 2001US-00764868
                                   (first entry)
                                                                                                          US2002168711-A1
                                                                                                                                                                                                                                                                                 01-SEP-2000;
01-SEP-2000;
                                                                                               Homo sapiens.
                                   04-DEC-2003
                        ADB93409;
RESULT 15
ADB93409
```

```
The invention relates to an isolated polypeptide. The polypeptide is useful for diagnosing a pathological condition or a susceptibility to a pathological condition in a subject, by determining the presence or amount of expression of the polypeptide in a biological sample and diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or amount of expression of the pathological condition based on the presence or amount of expression of the pathological condition based on the presence or amount of expression of the pathological condition or a susceptibility to a pathological condition, which involves contacting the polypeptide is useful for preventing the polypeptide is useful for preventing the polypeptide is useful for preventing the condition or the nucleic acid encoding the polypeptide is useful for preventing the polypeptide or the nucleic acid to a mammalian subject. The nucleic acid a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to the polypeptide are useful and an antibody to the polypeptide are useful as administrations. The polypeptide or a susceptibility to the polypeptide or sequence affinity antibodies and increase serum immunosophycessis or to in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2983 ACAAGGAAAAAAAAAAAGATATGTGAAAGGTTCACGTAAATTTCCTCACATCACAGAAGATT 3042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2330 TITATTAATGTCTAGGATGAAGAAATGCATAGAACATTGTAGTACTTGTAAATAACTAGA 2389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3103 TITATTAATGATCTAGGATGAAGAAGAAGCATAGAACATTGTAGTACTTGTAAATAACTAGA 3162
                                                                                                                                                                                                                                                                    New isolated polypeptide useful for diagnosing and treating immunosuppressive conditions such as autoimmune disease and Parkinson's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2923 CTTAGAGGATTTGCCTTTTGAGCAAATAGGGAAGGAGGAAATTATCAACTGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2270 AAAATTCAGAAAAGGAGAAAACACAGACCAAAGAGAAGTATCTAAGACCAAAAGGGATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2390 AATAACATGATTTAGTCATAATTGTGAAAATAATAATAATTATTTTCTTGGATTTATGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2150 CTAAGAATATTTTGTGTTTCTTTTCTCAGGGAATCTAAGGGAAGAAATTATCAACTGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2210 ACAAGGAAAAAAAAAAGATATGTGAAAGGTTCACGTAAATTTCCTCACATCACAGAAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
12.5%; Score 311; DB 9; Length 3276;
Best Local Similarity 95.5%; Pred. No. 6e-60;
Matches 320; Conservative 0; Mismatches 15; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 3276 BP; 1075 A; 495 C; 669 G; 1037 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                        Claim 3; SEQ ID NO 266; 345pp; English
                                                                                                                                                  Barash
                                                                                                                                               Rosen CA, Ruben SM,
                                                                                                                                                                                                WPI; 2003-719985/68
                                        (RUBE/) RUBEN S M.
(BARA/) BARASH S C.
                                                                                                                                                                                                                           P-PSDB; ADB94022.
                                                                                                                                                                                                                                                                                                                             disease.
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
```

2450 TGTATCTGTGAAAAATAAATTTCTTATAAAACTC 2484

ò

qq

3223 TGTATCTGTGAAAAATAAATTTCTTATAAAACTC 3257

Search completed: April 25, 2004, 08:46:17 Job time : 665.01 secs

o GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

```
@ Mon Apr 26 09:48:41 2004
```

```
April 24, 2004, 23:54:27; Search time 6540.9 Seconds (without alignments) 16460.143 Million cell updates/sec
                                                                                                                                                                                                                US-10-051-835-18
2484
1 gtttattcttgtattataac.....ataaatttcttataaaactc 2484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6940544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3470272 seqs, 21671516995 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                        IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenEmbl:*

11. gb_ba:*

23. gb_htg:*

44. gb_on:*

55. gb_on:*

77. gb_ph:*

88. gb_ph:*

100. gb_ro:*

110. gb_ro:*

111. gb_pr:*

122. gb_un:*

133. gb_un:*

144. gb_vi:*

155. em_bun:*

165. em_hum:*

166. em_hum:*

177. em_on:*

178. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em_ni:*

179. em
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     em_htgo_mus:*
em_htgo_other:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                        · .Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Searched:
                                                                            Run on:
```

is the number of results predicted by chance to have a Pred. No.

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

ŋ	
-	
4	
¥	
⋖	
Σ	
≥.	
ų	
ת	

Description	BX537508 Homo sapi AC104837 Homo sapi AC104837 Homo sapi AX40591 Sequence B01792 DNA sequence B01792 DNA sequence B01792 DNA sequence B01792 DNA encodin B01791 DNA sequence B01793 DNA encodin B01975 DNA encodin B01975 DNA encodin AX284603 Sequence B01978 DNA encodin AX284603 Sequence D28915 Homo sapien AX284505 Mus muscu AX378997 Sequence D28912 Homo sapien BC026914 Homo sapien BC026914 Homo sapien BC026917 Homo sapien BC015912 Homo sapien BC015912 Homo sapien BC015912 Homo sapien BC015912 Homo sapien BC015918 Homo sapien BC015918 Homo sapien BC015918 Homo sapien	BC024930 Mus muscu AC123055 Mus muscu AC123056 Nus muscu AC09264 Rattus no D28913 Homo sapien AX395818 Sequence 166494 Sequence 14 AC19312 Homo sapi AC09318 Homo sapi AC09318 Homo sapi AC05376 Homo sapi AC05376 Homo sapi AL593829 Human DNA AC189379 Homo sapi AL583829 Human DNA AC189379 Homo sapi AC06379 Homo sapi AL583829 Human DNA AC1386292 Human DNA AC1366292 Human DNA AC1366292 Human DNA AC1685 Homo sapi	NA linear PRI 17-JUN-2003 3 (from clone DKFZp686L21223). a; Vertebrata; Euteleostomi; ini; Hominidae; Homo. eil, B., Amid, C., Osanger, A.,
В ІВ	9 HSM805959 6 AZ28019 6 AZ28019 6 E01792 6 E01792 6 E01792 6 E01793 6 E01793 6 E01793 6 E01793 6 AZ284603 9 D28908S8 6 AX284296 6 AX284296 7 AX284296 7 AZ284296 9 D28908SS 9 D28908SS 9 D28908SS 6 AX378997 6 AX378997 7 AZ378997 9 D28908SS 9 D28909SS 9 D2890SS	BC0249 AC1230 AC1230 AC1230 BC0926 DC990908S AC39581 I 166494 AC1033 AC09321 AC09321 AC06397 AC06397 AC13807 AC13807 AC13807 AC13807 AC13807 AC13807 AC13807 AC13807 AC13807 AC13807 AC13807 AC13807 AC13807 AC13807	ALIGNMENTS 3062 bp mR 567 567 Chordata; Craniat Primates; Catarrh D., Mewes, H.W., W
% Query Match Length DE	151265 151265 17124 17124 17124 17124 17124 17132 1733	7 2228 4 187323 8 25214 13 288 14 212815 6 17218 6 169318 6 169318 6 169318 6 169318 6 169318 6 169318 6 169318 6 169318 6 169318 6 169318 6 169318 6 169318	HSM805959 Homo sapiens mRNA; c BX537508 EX537508 EX537508 Homo sapiens (human) Homo sapiens Homania; Eutheria; Mammalia; Eutheria; Mammalia; Habner; Fobo, G., Han, M. and Direct Submission
ore	2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4 444 444 444 444 444 444 444 444 444	RESULT 1 HSM805959 LOCUS DEFINITION HOMO 1 ACCESSION EX537 VERSION . SOURCE HOMO 0 ORGANISM HOMO 1 BUKAT HOMO 1 AUTHORS Wambu AUTHORS Wambu TITLE Direc

74:04:00 Ó mon Apr

1775 /organism="Homo sapiens"
/mol_type="maxka"

(db_xref="taxon:9606"
/map="lp31.1"
/clone="DKFzp686L21223"
/clone="DKFzp686L21223"
/clone="DKFzp686 (synonym: hlcc3). Vector pSport1_Sfi; host DH108; sites SfilA + SfilB"
/dev gtage="adult"
/dev gtage="adult" 1595 1715 Submitted (17-JUN-2003) MIPS, Ingolstaedter Landstr.1, D-85764
Neuherberg, GERMANT
Meuherberg, GERMANT
Melcular Genome Analysis, German Cancer
Research Center (DKF2); Email s.wiemann@dkfz.heidelberg.de;
sequenced by AGOWA (Berlin/Germany) within the cDNA sequencing
consortium of the German Genome Project.
This clone (DKF2p686L21223) is available at the RZPD in Berlin.
Please contact the RZPD: Reseourcentsentrum, Heubnerweg 6, 14059
Berlin-Charlottenburg, GERWANY; Email: clone@rzpd.de Further
information about the clone and the sequencing project is available
at http://mips.gsf.de/proj/cDNA/. 1175 1355 1415 1964 1475 1535 2144 TICTCACACTATGTTTCTTTACTTGGGACCTAGAACTGGATTGGATTGCTCCTG 1655 2264 1235 1784 1295 1844 1904 2024 2084 ö TGACTTGCCTTTTTGTTTCTTTCCTTCAPCTTAGTCCCTCTTCAPGCAGTATGGTCATTG 1236 GACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTGAGCAAATAGGTA 1785 GACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTGAGGAATAGGTA GCTTTTTAACCCACTCCCTGGATGCATTTTTCCCTCCTTGCATTTCCCTCTTTTCCTGGA 1965 GCTTTTTAACCCACTCCCTGGATGCATTTTTCCCTCCTTGCATTTCCCTCTGTA GTTCATACTAGAGAATCTGCACTATGTTTTTCCCTTTTTTGTCTTGAGATGAAAGTTTTAA AATAATCCACCTCTGTCATTTCCACTCTCTGAACATCCCAAGCTGTATACCCTGGCCTCTT ATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAATTCTTGCTCTGA TCTATTAAATACCTGGCAGCTCTCTGTCTTTTTGTGGGTTGTTGCCCTGTGATTAGTTCT GTTCATACTAGAGAATCTGCACTATGTTTTTCCCTTTTTTGTCTTGAGATGAAAGTTTTAA AATAATCCACCTCTGTCATTTCCACTCTGAACATCCCAAGCTGTATCCCTGGCCTCTT 1116 AGCTAGAGGAAGTCCAAAGAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCA GATGGTTTGGTGTGGAAGCTTGGAAGCGGTCAGGTAGTTGGCTACTTTCTGCTTGGA Gaps 0, Length 3062; Query Match
55.1%; Score 1369; DB 9; Length 3
Best Local Similarity 100.0%; Pred. No. 3.9e-260;
Matches 1369; Conservative 0; Mismatches 0; Indels polyA_signal polyA_site ORIGIN 1665 1176 1725 1845 1356 1905 1416 1476 2025 1536 2085 1596 2145 1656 2205 1296 JOURNAL FEATURES 음 상 음 8 8 8 g g g ò ò ઠે ģ

AC104837
Homo sapiens chromosome 1 clone RP4-641G12, complete sequence.
AC104837 AL157947
AC104837.2 GI:18249998
HTG. 2195 2375 1835 2075 2804 2864 2504 CCTGAGATAATCCACTAAGAATATTTTGTGTTTCTTTTTCTCAGGGAATCTAAGGGAGGAA 2925 IGTAAATAACTAGAAATAACATGATTTAGTCATAATTGTGAAAAATAATAATTTTC 2745 ATTATCAACTGTGCACAAGGAAAAAAATAGATATGTGAAAGGTTCACGTAAATTTCCTCA CATCACAGAAGATTAAAATTCAGAAAAGGAGAAAAACACAGACCAAAGAGAAGTATCTAAGA TGTAAATAACTAGAAATAACATGATTTAGTCATAATTGTGAAAAATAATAATTTTTTC ATATTAGCGTTGGGTTGAGATTTTCAGTGGTCCAATATTCCTTTCCCTCTGGTTGCCTTT CCTGAGATAATCCACTAAGAATATTTTGTGTTTCTTTTCTCAGGGAATCTAAGGGAGAAA CCAAAGGGATGTGTTTATTAATGTCTAGGATGAAGAAATGCATAGAACATTGTAGTACT 2325 CTAGGTAGAGGTATGTCCTTTTATGTAATGGCCACCGCATTTAGTATTACATAAACTTTC 2385 TITIAACAATCTGTGCATAGTACATGCTGCTCTGTTCCATTTAGAGATTTGACAGGTT TCAGTTTAGTATACTCAAATCTTATTTTAGTGCTTGGGAAATCAATTCAGAATATCACAT TCAGITTAGIATACTCAAATCTTATTTTAGIGCTTGGGAAATCAATTCAGAATATCACAT ATTATCAACTGTGCACAAGGAAAAAATAGATATGTGAAAAGGTTCACGTAAATTTCCTCA CTAGGTAGAGGTATGTCCTTTTATGTAATGGCCACCGCATTTAGTATTACATAAACTTTC TIGGATITATGITCTGTATCIGIGAAAAATAAATTTCTTATAAAACTC 2484 Homo sapiens 2685 2316 2865 2436 2985 1896 2445 1956 2505 2076 2625 2136 2196 2256 2805 2376 1776 1836 RESULT 2
AC104837
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
CETWORDS
SOURCE
ORGANISM g 요 6 8 6 8 6 8 6 8 6 8 6 888 के वि क ò ò

Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
I (Dases I to 151265)
Kaul, R.K., Olson, M.V., Zhou, Y., James, R.A., Rouse, G., Wu, Z., Saenphimmachak, C., Phelps, K.A., Raymond, C. and Haugen, E.D. TITLE JOURNAL REFERENCE AUTHORS TITLE JOURNAL REFERENCE AUTHORS

Washington Wu, Z., Unpublished

(bases 1 to 151265)

Kaul,R.K., Olson,M.V., Raymond,C. and Haugen,E.D.

Subrect Submission
Submitted (21-DEC-2001) Genome Center, University of W
Box 352145, Seattle, WA 98195, USA
3 (bases 1 to 151265)
Kaul,R.K., Olson,M.V., Zhou,Y., James,R.A., Rouse,G., REFERENCE AUTHORS

0T-CC0-TC0-0T-81

5105	1698 < 800	<800	1698	921	1698	3844	1985	<800	1072	<800	2150	5775	<800	5105	2369	6155	1387	3162	1534	2150	1072	2150	6646	2511	1534	3162	4486	<800	3416	1237	6646	6155	2369	2369	3844
5168	1735	643	1685	981	1768	3918	1954	144	1072	83	2311	5786	125	5168	2370	6218	1401	3103	1596	2183	1008	2306	6999	2485	1547	3149	4483	448	3382	1229	6999	6227	2346	2369	3876
1297	4660	5541	2948	4843	12485	1612	2408	781	5894	2178	1297	×800	781	×800	6736	2284	<800	<800	<800	<800	4390	6 800	6736	<800	4049	2178	4257	1195	7536	<800	2948	6115	1863	5233	6115
1247	4695 3373	5592	2918	4933	12634	1681	2417	765	5897	2196	1337	671	784	499	6819	2344	15	73	. o	15	4408	507	6599	592	4112	2133	4311	1158	7399	211	3006	6064	1785	5272	6135
<800	4705	4225	3694	6047	<800	<800	<800	<800	1463	1373	786	2953	985	<800	1373	<800	1961	8762	985	6047	1264	3971	2842	<800	186	1093	1373	2953	7803	1686	068	5107	2582	<800	×800
106	4682	4198	3725	5850	418	575	337	290	1493	1375	777	2880	866	119	1401	305	1953	6698	816	6245	1288	4012	2789	109	791	1112	1445	3016	7827	1713	881	5148	2540	407	82
•				···										•			<u>.</u> .								pq	hc. bp)		T T			•		-		
and Haugen, E.D.	ersity of Washington, ced gi:17976475.	Center	edu				of reads s	ads of reads	19 t Q40	t 030 t 020	um-of-contigs			÷	e quality rogram.	d to quality zero. We less than	lly visible from the	as part	s otherwise noted:	sequenced with an ity data (i.e., Phred	olve all sequencing all regions were	more than one M13 restriction digest.		ole Complete Digest entally derived digest	is is given below. Ists of both insert ar	the entire circular BA approximately 400-800	ence do not appear naining discrepancies	lues. Uniquely ordered	Bglii	SeqDerMap FngrPrnt			5671 5775	4181 4233	7761 7676
Raymond, C.	enter, Universa SA reion replace	gton Genome	washington.	on.edu	u	2 (sc0195)	L08752; 31% 69% of read	; 75% of reg g Dye; 25%	sion 0.9903 ses at leas	ses at leas ses at leas	contigs 20 bases; s		5) AL354946 1) AC099674		ith sequenc assembly p	been reduce ected to ha	not genera	e available	llows unles	tranded or y high qual	ade to reso nd repeats;	subclone or onfirmed by		d by Multip he experime	ed fragment uence consi	represent t e cutoff (a	rint and he ificant rem	edicted val ed lines.	III	FngrPrnt		4660	×800	<800	2820
	ő ä	2,	-	ă .	ų.	```		FH	H R	ğğ	ŢÖ		8 4		3 0		ەب	rd H	ţ,	9,0	8 8	E.		t te	ri ğ	젇	66	PP.	'	۱ بو	1	0 1	449	512	2814
elps, K.₽	WA 98195, Sequence v	Center 7 of Washin	www.genome.	eu.washing SC	c Informati ne: chr-1	: RP4-641G1 Statistics	: plasmid;	rminator Er	Phrap; ve : 151256 b	: 151265 b : 151265 b	65; sum-of 13.7x in	••	(UWGC: BCO)	ввшепт:	annotated y the Phra	bases have 40 are ex	values ar	rmat but 1 file.	ished as	er double r covered	tempt wa	ne plasm: embly was		en valida arison of	nce-predi igested s	accuratel w a varia	the finge are no si	ntal and ted by da	Hi	SeqDerMap	1	4702	4		
hak,C., Phelps,K.A ission	19-JAN-2002) Genome Seattle, WA 98195, 2002 this sequence v	Genome Center University of Washin	Code: UWGC e: http://www.genome.	: uwgchtgs@u.washing(g Center: SC	Project Informati project name: chr-1	clone name: RP4-641G1 Summary Statistics	ing vector: plasmid; ing vector: plasmid;	ry: Dye-terminator E ry: Dye-terminator B	y program: Phrap; ve us quality: 151256 b	us quality: 151265 b us quality: 151265 b	<pre>size: 151265; sum-of coverage: 13.7x in</pre>	Sequences:	11-369G23 (UWGC:sc0) 11-143H12 (UWGC:sc0)	ality Assessment:	has been annotated computed by the	ly edited bases have vels above 40 are ex	ı 10,000 bp. ıse quality values ar	at file format but try's ASN.1 file.	nce was finished as	-were either double themistry or covered	30); an attempt wa such as compression	at least one plasmind the assembly was	lidation:	ence has been validations	with sequence-predi conically-digested s	n order to accuratel gments below a varia	ssolved in the finge ole. There are no si	ne experimental and are separated by da	RI Hİ	FngrPrnt SeqDerMa			2175	-	×800
Saenphimmachak, C., Phelps, K.P Direct Submission	Submitted (19-JAN-2002) Genome Center, University of W Box 352145, Seattle, WA 98195, USA On Jan 19, 2002 this sequence version replaced gi:1797	Genome Center Center: University of Washin	Center Code: UWGC Web site: http://www.genome.washington.edu	Contact: uwgchtgs@u.washing/ Drafting Center: SC	Project Information Center project name: chr-1	Center clone name: RP4-641G12 (sc0195)	Sequencing vector: plasmid; Sequencing vector: plasmid;	Chemistry: Dye-terminator E' Chemistry: Dye-terminator B	Assembly program: Phrap; ve Consensus quality: 151256 b	Consensus quality: 151265 b Consensus quality: 151265 b	Insert size: 151265; sum-of-contigs Quality coverage: 13.7x in Q20 bases; sum-of-contigs	Overlapping Sequences:	5': RP11-369G23 (UWGC:sc0385) AL354946 3': RP11-143H12 (UWGC:sc0641) AC099674	Sequence Quality Assessment:	This entry has been annotated estimates computed by the Phra	All manually edited bases have been reduced to quality Quality levels above 40 are expected to have less than	1 error in 10,000 bp. Base-by-base quality values ar	GenBank flat file format but of this entry's ASN.1 file.	This sequence was finished as	all regions-were either double alternate chemistry or covered	quality >= 30); an attempt wa problems, such as compression	covered by at least one plasmid subclone or more than one M13 subclone; and the assembly was confirmed by restriction digest.	Sequence Validation:	This sequence has been validated by Multiple Complete Digest fingerprinting. Comparison of the experimentally derived digest	fragments with sequence-predi The electronically-digested s	vector, in order to accuratel Small fragments below a varia	are not resolved in the finge in the table. There are no si	between the experimental and fragments are separated by da	BCORI		1			•	'

Oy 1656 ATCAGATGAGCCTTTGATTATTTGCCCCTTCCTTAGGACCTTACACTCCTGTCTTTCTT	OY 1776 CTAGGTAGAGGTATGTCCTTTTATGTATTGGCCACCGCATTTAGTATTACATAAACTTTC 1835	Db 59975 CCTCTAACTCTTACTCTAAATTGCTGGAAACTCTCATGTTACTTAC	Oy 2256 CATCACAGAAGATTAAAATTCAGAAAGAGAAAACACAGACCAAAGAGAAGTATCTAAGA 2315 Db 60175 CATCACAGAAGATTAAAATTCAGAAAGGAGAAAACCAAAGAGAAGTATCTAAGA 60234 Oy 2316 CCAAAGGGATTTTATTAATGTCTAGAGAAAATGCATAGAACATGTAGTACTA 2375 Db 60235 CCAAAGGGATGTCTTTTATTAATGTCTAGGAAGAAATGCATAGAACATTGTAGTACT 2375 Oy 2376 TGTAAATAACTAGAAATAACTCTAGGATGAAAATGCATAGAAATAATTTTC 2435 Db 60295 TGTAAATAACTAGAAATAACATGATTAATCATAATTGTGAAAATAATTTTTC 60354 Oy 2436 TGGAATTATGTTCTGTAATTAATTATTAGTCATAATTGTGAAAAATAATTTTTC 60354 Db 60355 TTGGAATTATGTTCTGTAAAAAAAAAAAAAAAAAAAAAA	RESULT 3 AX285019 LOCUE DEFINITION Sequence 824 from Patent W00179556. ACCESSION AX285019 VERSION AX285019 AX285019.1 GI:17045707 KEYWORDS SOURCE ORGANISM Homo sapiens (human) ORGANISM AMMMalia; Eutheria; Primates; Catarrhin; Hominidae; Homo. REFERENCE AUTHORS Lillie,J., Brown,J.L., Bolt,A. and van Huffel,C. TITLE Novel genes, compositions and methods for the identification, and therapy of human cancers
6888 6968 1695 1754 1124 1072 2901 2953 1370 1297 690 921 2027 1961 7558 7536 2002 1985 4831 4869 803 781 2642 2750	<pre><800 6008 5894 1161 683 <800 3115 3289 3203 <800 2214 2178 <800 6853 6736 <800 79 <800 2443 9584 9394</pre>	2477 2443 1895 2031 2092 1985 2986	1176 ATTATTCCTCTGAGGGGGGGCCCTGTAAGGATGTTCTAATTCTTTCT	1416 GCTTTTTAACCCACTCCCTGGATGCATTTTCCCTCGTTTTCCTTTTCTGGA 1475 59335 GCTTTTTAACCCACTCCTGGATGCATTTTCCCTTGCATTTCCTTGGA 1475 1476 GTTCATACTAGAGAATCTGCACTATGTTTTTCCCTTGCATTTCCTTGGATGAAAGTTTTAA 1535 [1536 AATAATCCACTCTGTCATTTCCACTCTCTGAACATGAAAGTTTTAA 59454 1536 AATAATCCACCTCTGTCATTTCCACTCTCTGAACATGAATGA

```
Homo saplens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhin; Hominidae; Homo.

I (Bases I L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkina, R.F., Jordan, H., Moner, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares M.B., Bonaldo, M.F., Casavant, T.L.,
Scheerz, T.E., Brownstein, M.J., Usdin, T.E., Toshiyuki, S.,
Carninci, P. Prange, C., Raha, S.S., Uquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.T.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Ranch, A., Whiting, M., Madan, A., Young, A.C., Shevohenko, Y.,
Boutfard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.,
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smallus, D.E.,
Schnerch, A., Scheni, J.E., Ones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences
P. S. 1888-1877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BC022870
Homo sapiens interferon-induced protein 44, mRNA (cDNA clone MGC:24007 IMAGE:4071404), complete cds.
BC022870.1 GI:18605553
                                                                                                                                                                                                                                                                                                                                                                                        2195
                                                                                                                                                                                                                                                                        2309
                                 2129
                                                                                                                                                                                                                                                                                                              2314
2075
                                                                                                                                                                                                                                                                                                                                   Direct Submission
Submitted (04-FEB-2002) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2371 GTACTIGIAAATAACTAGAAATAACAIGATITAGICATAATIGIGAAAAATAATAAT 2427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2430 GTACTIGIAAATACCIAGAATACCIGGATITIGGCCATAATGIGAAAAAAAANT 2486
                   2190 CCTGAGATAATCCACTAAGAATATTTTGTGTTTCTTTTCTCAGGAATCTAAGGGAGGAA
                                                                                                                                                                                                                                                           2255 ATTATCAACTGTGCACAAGGAAAAAAAAAAGGATAGGAAAGGTTCACGTAAATTTCCTCA
                                                                                                                                                                                                                                                                                                              CATCACAGAAGATTAAAATTCAGAAAAGGAGAAAAACACAAGAACAA-AGAGAAGTATCTAAG
                                                                                             2130 AIAITAGCGTIGGTIGGATTTTCAGIGGICCAATATTCCTCTTCCCTCTGGTIGCCTTT
                                                                                                                                                      CCIGAGAIAAICCACIAAGAAIAITITIGIGITITCITITICICAGGGAAICTAAGGGAAGAA
                                                                                                                                                                                                                                  2196 ATTATCAACTGTGCACAAGGAAAAAAAAAATAGATATGTGAAAGGTTCACGTAAATTTCCTCA
                                                                            2076 AIATTAGCGTIGGTIGAGATTTTCAGTGGTCCAATATTCCTCTTCCCTCTGGTTGCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                to 1714)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 (bases 1 t
Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                    2256.
                                      2070
                                                                                                                                                          2136
    2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
MEDLINE
PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 4
BC022870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                   g g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                           셤
                                                                                                                                                                                        셤
                                                                                                                                                                                                                                    8 8 8
                                                                            ઠ્ઠ
                                                                                                                                                      ઠ
                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATAATCCACCTCTGTCATTTCCACTCTCTGAACATCCCAAGCTGTATCCCTGGCCTCTT 1595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGACTTGCCTTTTGTTTCTTTCCTTCATCCTAGTCCCTCTTCATGCAGTATGGTCATTG 1775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1830 CTAGGTAGAGGTATGTCCTTTTATGTAATGGCCACCGCATTTAGTATTACATAAACTTTC 1889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTTAACAATCTGTGCATAGTACATGCTGCTCCTGTTCCATTTAGAGATTTGACAGGGTT 1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2015
                                                                                                                                                                                                                                                                                                                                          1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1470 GCTITITIAACCCACTCCCTGGAIGCATITITICCCTCCTTGCATITCCCTCTTTTCCTGGA 1529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1650 TICTCAGACTATGTTTCTTTACTTGGGACCTAGAACTGGGTTGGATTGCATTGCATTGCTCTG 1709
                                                                                                                                                                                                                                                                                                                                                                                                                        1295
                                                                                                                                                                                                                                                                                                                                                                                                                                           1290 GACGAAIGCTAIGGGCIGCAGAIGACTICITAGAGGAITIGCCTITIGAGCAAAIAGGTA 1349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTTTTTAACCCACTCCCTGGATGCATTTTTCCCTTGCATTTCCCTCTTTTCCTGGA 1475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GITCATACTAGAGAATCTGCACTATGTTTTCCCTTTTTGTCTTGAGATGAAAGTTTTAA 1535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2069
                                                                                                                                                                                                                                                                                     1230 ATTATICCTCIGAGIGGGAGCIGGACCCTGIAAAGGAIGTICHTATICTTICGCTCTGA 1289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAIGGITIGGIGGIGGIAGCIIGGAAGCGGICAGGIAGTIGGCIACITICIGCIIGGA 1355
                                                                                                                                                                                                                       ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1890 TITIAACAATCTGTGCATAGTACATGCTGCTCTGTTCCATTTAGAGATTTGACAGAGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2010 CCTCTCCAATTCTCTCTTACTCAAATTGCTGGGAAACTCTCATGTTACTAACTTTGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTAGGTAGAGGTATGTCCTTTTATGTAATGGCCACCGCATTTAGTATTACATAAACTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAGTTTAGTATACTCAAATCTTATTTTAGTGCTTGGGAAATCAATTCAGAATATCACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTCTCCAATTCTCTTTACTCAAATTGCTGGGAAACTCTCATGTTACTAACTTTGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATGGTTTGGTGTGTGGAAGCTTGGAAGCGGTCAGGTAGTTGGCTACTTTCTGCTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCTCAGACTAGGTTCTTTACTTGGGACCTAGAACTGGATTGGATTGGCTTGCTCCTG
                                                                                                                                                                                                                                                                                                                                          ATTATICCICIGAGIGGGAGCIGGACCCIGTAAAGGAIGITCIAATICTICTGCTCTGA
                                                                                                                                                                                                                                                             AGCTAGAGGAAGTCCAAAGAAACTTGGATTTTGCTCTTTCTGACATCTCGGTGGTTAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                        GACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTGAGCAAATAGGTA
                                                                                                                                                                               DB 6; Length 2527;
                                                                                                                                                                                                                       2,
                                                                                                                                                                                                                     14; Indels
                                                                                                                                                                             Score 1235.2; DE
Pred. No. 1e-233;
0; Mismatches 1
  Patent: WO 0179556-A 824 25-OCT-2001,
Millennium Predictive Medicine, Inc.
Location/Qualifiers
1..2527
                                                                                /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db xref="taxon:9606"
                                                                                                                                                                           49.7%;
Best Local Similarity 98.6%;
Matches 1298; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1956
                                                                                                                                                                                                                                                                1116
                                                                                                                                                                                                                                                                                                                                            1176
                                                                                                                                                                                                                                                                                                                                                                                                                          1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1596
                                                                                                                                                                                                                                                                                                   1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1296
        JOURNAL
                                                                                                                                           ORIGIN
```

8 8 8

8 B 8

g

 δ

ò

g ઠે g ઠે g 8 දු පු

ਨੇ qq ò ద ઠે B ਨੇ g ઠે

g &

ВÞ

us-10-051-835-18.rge

```
CICATGIGGAIAGCAIGGAITIGAITACAAAAGGIGACCTIAIAGAAAIAGAGAGAIGIG 1185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1679 bp I Sequence 406 from Patent WO0222660. Ax405991. GI:21439421
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1366 TTGAGCAAATAGGGA 1380
                                                                                                                                                                                                                                                                                                                                                                                                              TTGAGCAAATAGGTA 1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               921
                                                                                                                                                                                                                                                                                                                                                                                                              1281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          983
                                                              1101
                                                                                                                                                                              1161
                                                                                                                                                                                                                                      1246
                                                                                                                                                                                                                                                                                                 1221
                                                                                                                                                                                                                                                                                                                                                      1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 5
AX405991
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                              ठ
                                                                                                      8 8 8
                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                   ያ
ያ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /codon_start=1
/codon_start=1
/product="interferon-induced, hepatitis C-associated
microtubular aggregat"
/protein_id="AAH22870.1"
/protein_id="AAH22870.1"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=10561"
/db_xref="Cousin=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1005
                                                                                                                                                                                                                                                                                                                       Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at: http://image.llnl.gov Series: IRAL Plate: 32 Row: n Coluum: 11 This clone was elected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 21361309. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCATGTGGATAGCATGGATTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGTG 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1006 GIGIGGCATITGTATITGAIGCCAGCTCTATICAATACTICTCCTCTCCAGAIGATAGTAA 1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATT 920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         946 CAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGAACAGAATTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGATCAAAAGAATTCGAAGGGAGTTGGTAAAACGCTGGTGGTACATGTGGCTTTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       801 AAATATTTTTGAATTAATATCTTGCTTTATGTCTACCTTACAGTTTAATCCCATGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          921 GIGIGGCATITGTATITGAIGCCAGCTCTATICAATACTICTCCTCTCAGAIGATAGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
      Contact: MGC help desk
Email: cgapbs.remail.nih.gov
Tissue Procurement: CLONTECH
CDNA Library Preparation: CLONTECH
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
contact: amadan@systemsbiology.org
contact: amadan@systemsbiology.org
Anup Madan, Jessica Fahey, Brin Helton, Mark Ketteman, Anurad
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               141. .302
//note="TLDc; Region: domain in TBC and LysM domain
containing proteins"
/db_xref="CDD:smart00584"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity 95.2%; Pred. No. 5.4e-80; Length 1714; Conservative 0; Mismatches 24; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="matN4"
/db_xref="taxon:9606"
/dlone="MGC:4807 IMAGE:4071404"
/tissue_type="Lung"
/clone_lib="NHH MGC_77"
/lab_host="DH10B"
/note="Vector: pDNR-LIB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. 1714
/gene="IFF144"
/note="synonyms: MTAP44, p44"
/db_xref="bocusiD:10561"
/90. 1424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Simi
Matches 471;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
            COMMENT
```

d ઠે 원 상 g ò g ò

```
Tang, Y.T., Liu, C., Zhou, P., Asundi, V., Zhang, J., Zhao, Q.A., Ren, F., Xue, A.J., Yang, Y., Wehrman, T. and Drmanac, R.T.
Novel nuclefic acids and polypeptides
Patent: WO 0222660-A 406 21-MAR-2002;
HYSEQ, INC. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TICTITCTGCTCTGAGAGGAATGCTATCGGCTGCAGATGACTTCTTAGAGGATTTGCCTT 1280
                                        TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAA 1220
                                                                                                                                                                                                                                                                    PAT 14-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    861 CAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATT 920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GIGIGGCATITGIAITIGAIGCCAGCICTATICAAIACTICTCCTCTCAGAIGAIAGIAA 980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       801 AAATATTTTTGAATTAATATCTTGCTTTATGTCTACCTTACAGTTTAATCCCATGGAAT 860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bukaryoča, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini, Hominidae; Homo.
                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 94.9%; Pred. No. 1.1e-79;
Matches 470; Conservative 0; Mismatches 25; Indels (
```

```
584 CAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATT
                                                                                                                                                                          921 GIGIGGCALTIGIAITIGAIGCCAGCTCTAITCAAIACTTCTCCTCTCAGAIGAIAAAGIAA
                                                                                                                                                                                                  981 AGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTGCTCA
                                                                                                                                                                                                                                                                                           704 AGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTGCTCA
                                                                                                                                                                                                                                                                                                                                                       1041 CTCATGTGGATAGGATTTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGTG
                                                                                                                                                                                                                                                                                                                                                                                    1101 AGCCTGTGAGGTCCAAGCTAGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   824 IGCCTGTGAGGTCCAAAGAAAGAAAACTTGGATTTGCTCTTTCTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1161 TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               884 ICTCGGTGGTTAGCAATTATTCCTCTGAGTGGGGGGCCTGGAACGAAGGATGTTCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1221 TTCTTTCTGCTCTGAGACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          944 TTCTTTCTGCTCTGAGACGAATGCTATGGCTGCAGATGACTTCTTAGAGGATTTGCCTT
AAATATTTTTTGAATTAATATCTTGCTTTATGTCTACCTTACAGTTTAATCCCATGGAAT
                                                                                      CAATCAAATTAAATCATGACTACATTGATTCCCCCATCGCTGAAGGACAGAATTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1281 TTGAGCAAATAGGTA 1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                801
                                                                                      861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 7
E01977
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                         8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                          셤
                                                                                                                                                                             ò
                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                         8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                 셤
                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pan paniscus
Bukaryota, Metazoa; Chordata, Craniata, Vertebrata; Euteleostomi,
Bukaryota; Metazoa; Chordata, Craniata, Vertebrata; Euteleostomi,
Bukaryota; Eutheria; Primates; Catarrhini; Hominidae; Pan.
I (Dases I to 1062)
Takahashi, K., Shibui, T., Uchida, M., Kurebayashi, R., Teranishi, Y.,
Nakanishi, S. and Kitamura, N.
DNA FRAGMENT
PATEMENT KASEI CORP
OS PAN paniscus (Chimpanzee)
PN 05-1980 20276-A, 2
PN 06-JAN-1987
PF 06-JAN-1987
PF 06-JAN-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
PF 31-MAR-1987
P
    1040
                                                                                      1100
                                                                                                                                                                                                                                                                 TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAA 1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E01792 1062 bp RNA linear PAT 29-SEP-1997 DNA sequence coding for non-A non-B hepatitis specific antigen protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                           1102
                                                                                                                1101 AGCCTGTGAGGTCCAAGCTAGAAGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA 1160
                                                                                                                                                                                                         1163 AGCCTGTGAGGTCCAAGCTAGAAGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA 1222
                                                                                                                                                                                                                                                                                                                                                          TICITICIGCICIGAGACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTT 1280
                                                                                                                                                                                                                                                                                                                                                                                    1283 TICTITCTGCTCTGAGAGGAATGCTATGGCTGCAGATGACTTCTTAGAGGATTIGCCTT 1342
                          1043 AGATCAAAAGAATTCAAAGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTGCTCA
                                                                                      CTCATGTGGATAGCATGGATTTGATTACAAAAGGTGACCTTATAGAAATAGAGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .1062
/product='Non-A non-B hepatitis specific
antigen protein'.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 18.1%; Score 448.6; DB 6; Length 1062; Best Local Similarity 94.1%; Pred. No. 2.2e-78; Matches 466; Conservative 0; Mismatches 29; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .1062
/organism="Pan paniscus"
/mol_type="genomic RNA"
/db_xref="taxon:9597"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E01792
E01792.1 GI:2170045
JP 1989002576-A/2.
Pan paniscus (pygmy chimpanzee)
Pan paniscus
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1281 TTGAGCAAATAGGTA 1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Treadcaaaraggga 1357
                                                                                                                                                                                                                                                                   1161
                                                                                                                                                                                                                                                                                                                                                          1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1343
                                                                                      1041
                                                                                                                                                                                                                                                                                                                 1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                    d
                                                                                                                     qq
                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                     8 8 8
                                                                                                                                                                                                                                                                                                                                                                                         Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                            ઠે
                                                                                                                                                                          δ
```

823

1040

703

763

920 643 980 1160

883

```
E01977.1 GI:2170225

S E01977.1 GI:2170225

JP 1989124387-A/3.

Pan troglodytes (chimpanzee)

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Marmalia; Butheria; Primates; Cararrhini; Hominidae; Pan.

I (bases 1 to 1062)

S hibui,T., Kurebayashi,R., Uesono,M., Teranishi,Y., Takahashi,K., MAXIESTATTON VECTOR HAVING DNA CODING NON-A NON-B HEPATITIS

S FECIFIC ANTIGEN, TRANSFORMANT AND PRODUCTION OF SAID ANTIGEN

MITSUBISHI KASEI CORP

OS Pan troglodytes

PN 1989124387-A/3

PN 1989124387-A/3

PN 1989124387-A/3

PN 1987124387-A/3

PN 1987124387-A/3

PT TAKAHASHI KAZUNOBU, NAKANISHI SHIGETADA, KITAMURA NAOMI PC

CLONOV-1987 UP 1987283990

PT TAKAHASHI KAZUNOBU, NAKANISHI SHIGETADA, KITAMURA NAOMI PC

CLISAIS/OO, ARIX139/29, CIZNI/20, CI2P21/02, (CI2P21/02, CI2R1:19); CC

STRANGHI SHISHI SAZUNOBU, NAKANISHI SHIGETADA, KITAMURA NAOMI PC

CC topology: Linear;

CC topology: Linear;

CC **Source: clone=pCDVCL-1;

CC **Source: clone=pCDVCL-1;

FH Key

FH Key

FH Key
E01977 1062 bp RNA linear PAT 29-SEP-1997 DNA encoding C-terminal peptide of type nonA nonB hepatitis specific antigen. E01977
```

```
Query Match
Best Local Si
Matches 466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1281
                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 9
E01975
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ્ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E01791 1332 bp DNA linear PAT 29-SEP-1997
DNA sequence coding for non-A non-B hepatitis specific antigen
protein.
                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAA 1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                981 AGATCAAAAGAAATTCGAAGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTGCTCA 1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCATGTGGATAGCATGGATTTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGTG 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1101 AGCCTGTGAGGTCCAAGCTAGAGGAAGTCCCAAAGAAACTTGGATTTGCTCTTTCTGACA 1160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TICITICIGCICIGAGACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTT 1280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TICTTTCTGCTCTGAGACGAAGGATGCTATGGGGTGCAGATGACTTCTTAGAGGATTTGCCTT 1003
                                      of type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        643
                                                                                                                                                                                                                                                                                                                                                                                                                                                  524 ACATATCCTACATCTTGAACGTAACATTCGTGATAGATACCAGTTTAATCCCATGGAAT 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      861 CAATCAAATTAAATCATCACATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATT 920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GIGIGGCAITIGIAITIGAIGCCAGCICTAITCAAIACITCCCCTCAGAIGAIAGIAA 980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              644 GTGTGGCATTTGTATTTGATGCCAGCTCTATTGAATACTTCTCCTCTCAGATGATAGTAA 703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              824 TGCCTGTGAGGTCCAAGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA 883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pan paniscus Parismannia (Craniata, Vertebrata, Euteleostomi, Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Pan. (Lases 1 to 1332) (Catarrhini, Hominidae, Pan. (Catarrhini, Robases 1 to 1332) (Catarrhini, Hominidae, Pan. (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, Robases) (Catarrhini, R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       584 CAATCAAAATTAAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATT
                                                                                                                                                                                                                                                                                                                                                                                                   AAATATTTTTGAATTAATATCTTGCTTTATGTCTACCTTACAGTTTAATCCCATGGAAT
                                                                                                                                                                                                                                                                                                                                                    Gaps
__feature 1. .1049
	/note='DNA encoding C-terminal peptide on nonA nonB nonB hepatitis specific antigen'.
Location/Qualifiers 1. .1062
1. .1062
/mol.type="qenomic RNA"
/mol.type="qenomic RNA"
                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 94.1%; Pred. No. 2.2e-78;
Matches 466; Conservative 0; Mismatches 29; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent: JP 1989002576-A 1 06-JAN-1989;
MITSUBISHI KASEI CORP
OS Pan paniscus (Chimpanzee)
PN JP 1989002576-A/1
PD 06-JAN-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E01791.1 GI:2170044
JP 1989002576-A/1.
Pan paniscus (pygmy chimpanzee)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1281 TIGAGCAAATAGGTA 1295
                misc_feature
             FT
FT
FT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        944
                                                                                                                                                                                                                                                                                                                                                                                                     801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ති<sub>.</sub>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

```
DNA encoding type non-A non-B hepatitis specific antigen.
E01975.
E01975.1 GI:2170223
UP 1989124387-A/1.
Pan troglodytes (chimpanzee)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1221 TICTHICHGCHCHGAGAATGCTATGGGCTGCAGATGACTICTTAGAGGATTTGCCTT 1280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1037 CTCATGTGGATAGCATGGATCTGATTACAAAAGGTGACCTTATAGAAATAGAGAAGGTGG 1096
                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                               916
                                                                                                                                                                                                                                                                                                                                                                               856
                                                                                                                                                                                    FH
                                                                                                                                                                                                                                                                                                                                                                                                      1101 AGCCTGTGAGGTCCAAGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1097 IGCCIGIGAGGICCAAGCIAGAGGAAGICCAAAGAAACTIGGAITIGCICTITCIGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1161 TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 981 AGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGGTGGTACATGTGGCTTTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1041 CTCATGTGGATAGCATGGATTTGATTACAAAAGGTGACCTTATAGAAAATAGAGATGTG
                                                                                                                                                                                                                                                                                                                                                       801 AAATATTTTTGAATTAATATCTTGCTTTATGTCTACCTTACAGTTTAATCCCATGGAAT
                                                                                                                                                                   peptide 1. .1332
/product='Non-A non-B hepatitis specific
incation/Qualifiers
1. .1332
/molltype='genomic DNA"
/db_xref='taxon:9597"
                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                    Length 1332;
                                                                                                                                                                                                                                                                                                   tch al Similarity 94.1%; Score 448.6; DB 6; Length al Similarity 94.1%; Pred. No. 2.1e-78; 466; Conservative 0; Mismatches 29; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGAGCAAATAGGTA 1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1277 Trichiczakarkiega 1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
```

```
Pan troglodytes (chimpanzee)
Pan troglodytes
Bakaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Bakaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Pan.
1 (bases 1 to 1665)
Takahashik, Kitamura, N., Shibui, T., Kamizono, M., Matsui, R.,
Toshiyama, Y., Maeda, T., Kondo, J., Honda, Y., Yamada, E.,
Shimizu, Y.K., Teranishi, Y. and Nakanishi, S.
Cloning, sequencing and expression in Escherichia coli of cDNA for
a non-A, non-B hepatitis-associated microtubular aggregates protein
                                                                                                                     CHPP44 linear PRI 21-DEC-2002 Pan troglodytes gene for non-A non-B hepatitis-associated microtubular aggregates protein p44, complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             861 CAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATT 920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       801 AAATATTTTTGAATTAATATCTTGCTTTATGTCTACCTTACAGTTTAATCCCATGGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                           J. Gen. Virol. 71 (Pt 9), 2005-2011 (1990)
21011346
2170570
These data Kindly submitted in computer readable form by: Yoshikaru Honda
Mitsubishi Kasei Co.
1000, Kamoshida-cho, Midori-ku
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18.1%; Score 448.6; DB 9; Length 1665; llarity 94.1%; Pred. No. 2.1e-78; Conservative 0; Mismatches 29; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1225. 1233 /note="put. N-glycosylation site"
/note="put. N-glycosylation site"
1628. 1633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721. .729
/note="put. N-glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    466. .474
/note="put. N-glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .1665
/organism="Pan troglodytes"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="mRNA"
/db_xref="taxon.9598"
/dorne="media"
/colone="media"
/cell_type="hepatocyte"
/note="CH41"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81-45-963-3454
81-45-963-3992.
Location/Qualifiers
    D90034.1 GI:218575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .1389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polyA_signal
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Sim:
Matches 466;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OS Pan troglodytes

PN JP 1989124387-A/1

PD 17-MAY-1989

PF 10-NOV-1987 JP 1987283990

PF 10-NOV-1987 JP 1987283990

PT SHBUI TATSUNO, KUREBAYASHI RIE, UESONO MICHIRU, PI
TERAHISHI YOTAKA.

PI TAKAHASHI KAZUNOBU, NAKANISHI SHIGETADA, KITAMURA NAOMI PC
C12N15/00,A61K39/29,C12N1/20,C12P21/02,(C12P21/02,C12R1:19); CC
SETANDECHESHI NO;
CC topology: Linear;
CC hypothetical: No;
CC *Source: Lissue type=Liver;
CC *Source: clone=pCDVCL-1;
CC Feature is identified by experimental;
FH Key

Mat_Deptide 1: 1332

FT mat_Deptide 1: 1332

FT mat_Deptide 2: 1332

FT mat_Deptide 1: 1332

FT mat_Deptide 2: 1332

FT mat_Deptide 2: 1332

FT mat_Deptide 1: 1332

FT mat_Deptide 1: 1332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTGCTCA 1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1097 TGCCTGTGAGGTCCAAGGTAGGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA 1156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCATGTGGATAGCATGGATTTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGTG 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1037 CTCATGTGGATAGCATGGATCTGATTACAAAAGGTGACCTTATAGAAATAGAGATGTG 1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1101 AGCCTGTGAGGTCCAAGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA 1160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAA 1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCTTTCTGCTCTGAGACGAATGCTATGGCTGCAGATGACTTCTTAGAGGATTTGCCTT 1280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCTTTCTGCTCTGAGACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTT 1276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               920

    1332
/product='type non-A non-B hepatitis specific

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAATATTTTTTGAATTAATATCTTGCTTTATGTCTACCTTACAGTTTAATCCCATGGAAT 860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    857 CAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATT 916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GIGIGGCAITIGIAITIGAIGCCAGCICTAITCAAIACTICCICTCTCAGAIGAIGAIAA 980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GIGIGAGCATTIGIATTIGATGCCAGCTCTATTGAATACTICTCCTCTCAGAIGATAGTAA 976
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Pan.
1 (bases 1 to 1332)
                                                              CAATCAAATTAAATCATGACTACATGATTCCCCATCGCTGAAGGACAGAATTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 18.1%; Score 448.6; DB 6; Length 1332; Best Local Similarity 94.1%; Pred. No. 2.1e-78; Matches 466; Conservative 0; Mismatches 29; Indels 0;

    1332
/organism="Pan troglodytes"
/mol_type="genomic RNA"
/db_xref="taxon:9598"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antigen'.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1281 TTGAGCAAATAGGTA 1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                            REFERENCE
AUTHORS
                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                            TITLE
                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
```

d ઠે g $\stackrel{>}{\delta}$ g ઠે g ઠે g ò a ઠે g δ

à

ö 960

ö

ö

Gaps

1040

8 & 8 &

ద ò

8, 8

ò g 8

d 8

```
Education Metazoa Chordata, Craniata, Vertebrata, Euteleostomi,
Educatora, Metazoa Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.

E (Dasses 1 to 1667)
Shibui, T., Kurebayashi, R., Uesono, M., Teranishi, Y., Takahashi, K.,
Nakanishi, S. and Kitamura, N.
Makanishi, S. and Kitamura, N.
MARNISERMINO VECTOR HAVING DNA CODING NON-A NON-B HEPATITIS
SPECIFIC ANTICEN, TRANSPORMANT AND PRODUCTION OF SAID ANTIGEN
MITSHESTATION OF EAST CORP
OS Pan troglodytes
PD 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
PP 17-MAY-1889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1093 CTCATGTGGATAGCATGGATCTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGTG 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E01978 1 1 NA BAT 29-SEP-1997 NA Contigen. B01978 101978. G11-27/0226
                                                                                                                                                                                                                                                                                                                                                        973 GIGIGGCATITGTATITGATGCCAGCTCTATIGATACTICTCCTCTCAGATGATGATAA 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                      1033 AGATCAAAAAGAAATTCGAAGGGGGGTTGGTAGTAAACGCTGGTGGGTACATGTGGCTTTGCTCA 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCATGTGGATAGCATGGATTTGATTACAAAGGTGACCTTATAGAAATAGAGAGATGTG 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1153 TGCCTGTGAGGTCCAAGCTAGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA 1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCCTGTAAAGGATGTTCTAA 1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1213 TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAA 1272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCTTTCTGCTCTGAGACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTT 1280
                                                                                                                                                                                                                                                                                                                                                                                                         981 AGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGGTACATGTGGCTTTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1273 TICTITCTGCTCTGAGACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTT
                                                                                                                                                                      853 ACATATCCTACATCTTGAACGTAACATTCGTGATAGATACCAGTTTAATCCCATGGAAT
                                                                                                                                                                                                                       CAATCAAATTAAATCATCATGACTACATTGATTCCCCCATCGCTGAAGGACAGAATTCATT
                                                                                                                                                                                                                                                      1101 AGCCTGTGAGGTCCAAGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA
                                                                                                                               801 AAATATTTTTGAATTAATATCTTGCTTTATGTCTACCTTACAGTTTAATCCCATGGAAT
                                                                                                                                                                                                                                                                                                                 GIGIGGCATTIGIATTIGATGCCAGCTCTATTCAATACTTCTCCTCTCAGATGATAGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PI TAKAHASHI KAZUNOBU, NAKANISHI RIB, UESONO MICHIRU, PI TAKAHASHI KAZUNOBU, NAKANISHI SHIGETADA, KITAMURA NAOMI C12N15/00.A61K39/29,C12N1/20,C12P21/02,(C12P21/02,C12R1:19); CC topology: Linear; CC typothetical: No:
                                                                                       ..
0
                                           Length 1667;
                                                                                   29; Indels
                                           DB 6;
                                         Query Match
18.1%; Score 448.6; DB 6
Best Local Similarity 94.1%; Pred. No. 2.1e-78;
Matches 466; Conservative 0; Mismatches 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JP 1989124387-A/4.
Pan troglodytes (chimpanzee)
Pan troglodytes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1281 TTGAGCAAATAGGTA 1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1333 TTGAGCAAATAGGGA 1347
                                                                                                                                                                                                                              861 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1221
                                                                                                                                                                                                                                                                                                                      921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 12
E01978
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
ORIGIN
                                                                                                                                                                             원
                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /8313

LERANTASHI RIE,
PI TERANTSHI YUTAKA, NAKANISHI SHIGETADA, KITAMURA NAOMI PC C12N15/00, C12N15/00, C12R1:91);
CC Strandedness: Double;
CC topology: Linear;
CC *source: tissue_type=Liver;
FH Key
FH Key
FT S'UTR 1..56
FT CDS
                                                                                                                                      1040
                                                                                                                                                                                                                              1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1271 TICTITCTGCICTGAGACGAATGCTATGGCTGCAGATGACTICTTAGAGGATTTGCTT 1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E01793 1667 bp RNA linear PAT 29-SEP-1997 DNA séquence coding for non-A non-B hepatitis specific antigen
                                                                                                                                                                                                                                                                     CTCATGTGGATAGCATGGATCTGATTACAAAAGGTGACCTTATAGAAATAGAGAGATGTG 1150
                                                                                                                                                                                                                                                                                                                        1101 AGCCTGTGAGGTCCAAGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA 1160
                                                                                                                                                                                                                                                                                                                                                               1151 TGCCTGTGAGGTCCAAGCTAGAGGAAGTCCAAGAAACTTGGATTTGCTCTTTCTGACA 1210
                                                                                                                                                                                                                                                                                                                                                                                                                reregergerrageaarrarrecrereagegegegegegegegegegargraaagargreraaa 1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1211 TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAA 1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TICITICIGCICIGAGAGGAAIGCIAIGGGCIGCAGAIGACTICITAGAGGAITIGCCIT 1280
                                                                                                                                                                                  1031 AGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTGCTCA 1090
  CAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATT 970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Pan.
1 (bases I to 1667)
1 Takahashi, K., Shibui, T., Uchida, M., Kurebayashi, R., Teranishi, Y., DNA FRAGMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F
                                                                           GTGTGGCATTTGTATTTGATGCCAGCTCTATTGAATACTTCTCCCTCTCAGATAGTAA
                                                                                                                                      AGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGTGGTACATGTGGCTTTGCTCA
                                                                                                                                                                                                                              CTCATGGGATAGCATGGATTTGATTACAAAAGGTGACCTTATAGAAAATAGAGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R 55. .1391
/product="Non-A non-B hepatitis specific antigen protein"
1392. .1667.
Location/Qualifiers
1. .1667/mol type="genomic RNA"
/do_xref="genomic RNA"
                                                GTGTGGCATTTGTATTTGATGCCAGCTCTATTCAATACTTCTCCTCTCAGATGATAGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Parent: JP 1989002576-A 3 06-JAN-1989;
MITSUBLISHI KASEI CORP

OS Pan paniscus (Chimpanzee)

PN JP 1989002576-A/3

PD 06-JAN-1989

PF 04-JUN-1989

PF 31-MAR-1987 JP 87P 78313

PI TAKAHABHI KAZUNOBU, SHIBUI TATSURO, UCHIDA MICHIRU,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E01793.1 GI:2170046
JP 1989002576-A/3.
Pan paniscus (pygmy chimpanzee)
Pan paniscus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGAGCAAATAGGTA 1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rrgagcaaaraggga 1345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1281
                                                                                                                                                                                                                              1041
                                                                                                                                                                                                                                                                          1091
                                                                                                                                                                                                                                                                                                                                                                                                                1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1331
                                                                                       971
                                                                                                                                      981
  911
                                                921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 11
E01793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
```

ដ្ឋ

261

201

ô

Gaps

ö 567;

1295

1355

321

381

1415

441

1475

501

```
Homo sapiens gene for hepatitis C-associated microtubular aggregate protein p44, exon 9 and complete cds.
D28915.1 G1:598954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.

I (Bases 49 to 483)

Kitamura, A., Takahashi, K., Okajima, A. and Kitamura, N.

Induction of the human gene for p44, a hepatitis-C-associated microtubular aggregate protein, by interferon-alpha/beta Bur. J. Biochem. 224 (3), 877-883 (1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Direct Submission
Submitted (11-MAR-1994) Naomi Kitamura, Institute for Liver
Submitted (11-MAR-1994) Naomi Kitamura, Institute for Liver
Research, Kansai Medical University; Moriguchi, Osaka 570, Japan
(Tel:06-992-1001(ex.2530), Fax:06-994-6099)
1.0cation/Qualifiers
1.483
                                                                                                                                                                                                                                                                                                                                                                                       1296 GAIGGIITGGIGGIGGGAAGCIIGGAAGCGGICAGGIAGIIGGCIACIITCIGCIIGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1476 GTTCATACTAGAGAATCTGCACTATGTTTTTCCCTTTTTGTCTTGAGATGAAAGTTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           442 GCTITITAACCCACTCCCTGGATGCATTTTTCCCTTCTTGCATTTCCCTTTCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       502 AGTCATACTAGAGAATCTGCACTATGTTTTTCCCCTTTTTGTCTTGAGATGAAAGTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                           322 GATGGTTTGGTGGTGGAAGCTTGGAAGCGGTCAGGTAGTTGGCTACTTTCTGCTTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1356 TCTATTAAATACCTGGCAGCTCTCTGTCTTTTTGTGGGTTGTTGCCCTGTGATTAGTTCT
                                                                                                                                                                                            1116 AGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCA
                                                                                                                                                                                                                                                                            202 AITATICCICIGAGIGGGAGCIGGACCIGIAAAGGAIGIICIAAIICIITICIGCICIGA
                                                                                                                                                                                                                                                                                                                                              262 GACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTGAGCAATAGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                382 TCTAITAAATACCTGGCAGCTCTCTGTCTTINTGTGGGGTTGTTGCCCTGTGATTAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1416 GCTTTTTAACCCACTCCCTGGATGCATTTTTCCCTCCTTGCATTTCCCTCTTTTTGGA
                                                                                                                                                                                                              142 AGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCA
                                                                                                                                                                                                                                                           GACGAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTTGAGCAAATAGGTA
                                                                                                                            Query Match 16.7%; Score 415.4; DB 6; Length Best Local Similarity 98.4%; Pred. No. 8.6e-72; Matches 419; Conservative 0; Mismatches 7; Indels
   (ag)
Location/Qualifiers
Location/Qualifiers
1. .567
/organism="Homo sapiens"
/mol type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 (bases 1 to 483)
Kitamura, N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATAAT 1541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         567
      Millennium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      of 8
                                                                                                                                                                                                                                                                                                                              1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SEGMENT
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE
PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 14
D28908S8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                    FEATURES
                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCTTTCTGCTCTGAGAGCAATGCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTT 1280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              973 GIGIGGCATTIGIATITIGATGCCAGCTCTATTGAATACTICTCCCTCTCAGATGATAGTAA 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAA 1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1213 TCTCGGTGGTTAGCAATTATTCCTCTGAGTGGAAGCTGGACCCTGTAAAGGATGTTCTAA 1272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGATCAAAAGAATTCGAAGGGAGTTGGTAAACGCTGGTGGTACATGTGGCTTTGCTCA 1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 20-NOV-2001
                                                                                                    H
                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                  860
                                                                                                                                                                                                                                                                                                                                                               912
                                                                                                                                                                                                                                                                                                                                                                                             CAATCAAATTAAATCATCATGACTACATTGATTCCCCATCGCTGAAGGACAGAATTCATT 920
                                                                                                                                                                                                                                                                                                                                                                                                                     921 GIGIGGCATTIGIATTIGATGCCAGCTCTATTCAATACTTCTCCTCTCAGATGATAGTAA 980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                      ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCATGTGGATAGCATGGATCTGATTACAAAGGTGACCTTATAGAAATAGAGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1273 TTCTTTCTGCTCTGAGACGAAGGATGAGGCTATGGGGCTGCAGATGACTTCTTAGAGGATTTGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCATGTGGATAGCATGGATTTGATTACAAAAGGTGACCTTATAGAAATAGAGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1101 AGCCTGTGAGGTCCAAGCTAGAGGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACA
                                                                                                                                                                                                                                                                                                                                                     AAATATTTTTGAATTAATATCTTGCTTTATGTCTACCTTACAGTTTAATCCCATGGAAT
                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lillie,J., Brown,J.L., Bolt,A. and van Huffel,C.
Novel genes, compositions and methods for the identification,
assessment, prevention, and therapy of human cancers
Patent: WO 0179556-A. 408 25-OCT-2001,
                                                                                                  /note='DNA containing complete sequence e nonA nonB
                                                                                                                                                                                                                                                                                                 ò.
                                                                                                                                                                                                                                                            18.1%; Score 448.6; DB 6; Length 1667; 94.1%; Pred. No. 2.1e-78; 1.1ve 0; Mismatches 29; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                    type nonA nonb
hepatitis specific antigen'.
        *source: tissue_type=Liver;
*source: clone=pCDVCL-1;
Feature is identified by experimental;
Key
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                    1. .1667
/organism="Pan troglodytes"
/mol_type="genomic RNA"
/db_xref="taxon:9598"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         567 bp
WO0179556.
                                                                                        .1667
                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX284603
Sequence 408 from Patent
AX284603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX284603.1 GI:17045291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTGAGCAAATAGGTA 1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Treascalarages 1347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                Query Match 18.1
Best Local Similarity 94.1
Matches 466; Conservative
                                                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1221
          H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1093
                                                                                                                                                                                                                                                                                                                                                                   853
                                                                                                                                                                                                                                                                                                                                                                                                861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  981
                                                                                                                                                                                                                                                                                                                                   801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
AX284603
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                              ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ਨੋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ਨੇ
                                                                                                                                                                                                                                                                                                                                     ઠ
```

cancers

of human

1182 1242 1302 1361 1421 1422 TAACCCACTCCCTGGATGCATTTTTCCCTCCTTGCATTTCCCTCTTTTCCTGG-AGTTCA 1480 367 427 486 307 546 188 GGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCAATTATTC CTCTGAGTGGGAGCTGGACCCTGTAAAGGATGTTCTAATTCTTTTCTGCTCTGAGACGAAT 428 AAATACCTGGCAGCTCTCTGTC-TTTTGTGGGTTGTTGCTCTGTGAATAGTTCTGCTTTTT 487 TAACCCACTCCCTGGATGCATTTTTNCCTTCTTGCATTTCCCTCTTTTCTGGAAGTTCA 308 GCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTGAGCAAATAGGTAGATGGTT TGGTGGTGT-GGAAGCTTGGAAGCGGTCAGGTAGTTGGCTACTTTCTGCTTGGATCTATT 368 TGGTGGTGTGGGAAGCTTGGAAGCGGTCAGGTAGTTGGCTACTTTCTGCTTGGAICTATT 1362 AAATACCTGGCAGCTCTCTGTGTTTTTTTTGTGGGTTGTTGCCCTGTGATTAGTTCTGCTTTT 1243 GCTATGGGCTGCAGATGACTTCTTAGAGGATTTGCCTTTTGAGCAAATAGGTAGATGGTŢ 1123 GGAAGTCCAAAGAAAACTTGGATTTGCTCTTTCTGACATCTCGGTGGTTAGCAATTATTC Gapa 4; Score 331.2; DB 6; Length 580; Pred. No. 3.6e-55; 0; Mismatches 10; Indels 4 1481 TACT-AGAGAATCTGCACTATGTTTTTCCCTTTT 1513 assessment, prevention, and therapy of hu Patent: WO 0179556-A 101 25-OCT-2001; Millennium Predictive Medicine, Inc. (US) Location/Qualifiers 547 racraanagaarcrigcacraarggrirrcccrrr 1. .580 /organism="Homo sapiens" /mol_type="unassigned DNA" /db_xref="taxon:9606" Query Match
Best Local Similarity 96.4%;
Matches 380; Conservative 1303 1183 JOURNAL FEATURES ORIGIN 셤 g g ò ઠે 셤 ò 음 ð ઠ ద Š

Search completed: April 25, 2004, 18:58:36 Job time : 6545.9 secs

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Homo sapiens (human) Homo sapiens

Lillie, J., Brown, J.L., Bolt, A. and van Huffel, C. Novel genes, compositions and methods for the identification,

REFERENCE AUTHORS TITLE

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on:

April 25, 2004, 07:00:48; Search time 2810.53 Seconds (without alignments) 16458.288 Million cell updates/sec

Title: US-10-051-835-17 Perfect score: 1549 Sequence: 1 aacacatcagatattttcag.......ctctaaatctttaccatcaa 1549

IDENTITY_NUC Gapop 10.0 , Gapext 1.0 Scoring table:

27513289 seqs, 14931090276 residues Searched:

55026578 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

em_estba:*
em_estbum:*
em_estlin:*
em_estcov:*
em_estcov:*
em_estrov:*
em_estrov:*
em_estrov:*
em_estrov:*
em_estrov:*
em_estrov:*
em_estrov:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estrow:*
em_estr em_gss_phg:* em_gss_vrl:* gb_gssl:* gb_gss2:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

			Description		BM471130 AGENCOURT	BE888763 601513677	AL603127 DKFZp686D
SUMMARIES			ΔI	889 57.4 1200 13 BX447355	BM471130	BE888763	AL603127
			ВВ	13	12	10	6
			Length	1200	1062	972	919
	ф	Query	Match	57.4	52.6	39.8	39.7
			No. Score	889	814.2	617.2	614.4
		Result	No.	1	7	m	4

CB134607 CB134607 K-ES	1904 BA4/390 1846 CB12384	116 BX45711	:535 AK05253)60 AL701060	970 BG61597	1751 CD70675	2890 AW53289)18 AL700018	139 BX47383	.86 BE68328	170 CB10527	.1 AL700011	12 AL700902	199 BF56249)35 CC52393	.2 AI370412	170 AZ38337	183 CF74546	795 AW52679	116 BE09731	399 BZ206599	500 BF562500	761 BG272761	978 BZ60897	45 AW260345	77 CKOIBI//	S7 CB770357 AMGNINU	189 BG942089 ax21a0	182 BX436282	757 CG757757 P053-	750 BX217750 Da)14 CG748014 P041-4	01571 CD701571 EST18	AY406818 Homo s	7313 oz45el	
	ມ 44 9 Ω				2 2					0 BI		A.	Ę	0	o Ö	AI										4, a									AI	
-1-		-	٦	σ	Н	Н	Н	0	Н	Н	-1			٢	7		N	Г	Н	-	Ŋ	Н	Н	Ŋ	~ 1	H (۱ -	Т	Н	(1)	N	N	Н	N		
601	- ~	າເດ	tO	S	S	0	₹"	w	~	ம	4	N	N	せ	m	0	-	0	~	v	ന	œ	н	œ	$^{\circ}$	oo ⊢	1 4	ത	12	w	σ	m	18	4	m	
88			4	œ.	Ġ	4.	e.	۳.	ď	ä	ä	4	ä	。	ο.	۲.	7.	9	'n	ທ	ά.	•	•	•	•	•				•						
ᆵ (• 60	'n	89.	33.		77.	68	58.	51.	35.	33	26.	ů.	20.	30	~	67.	60.	•	39.	90.	18.	7	2	m,	•	. 4	۲.	4.	'n	ω,	m.	7	\vdash	71.6	
9											_	m	a	0	-	N	ო	4	Š	9	7	80	6	90	ቷ :	2 2	4	22	96	7	8	o	0	-	Ŋ	
9 6	-	œ	o	10	급	12	13	7	H	Ä	Н	Ã	H	Ö	7	N	N	(4	"	"	"	• •	.,	٠.,		,			,		1.1	"	4	ক	4	

ALIGNMENTS

```
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Eukaryota, Metazoa, Chordata, Catarrhini, Hominidae, Homo.
E. (Dasses 1 to 1062).

NIH-MCC http://mgc.nci.nih.gov/.
L. Onpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue produrement: ArCC
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technol
                                                                                                                                                                                                                                                                                                      BM471130

AGENCOURT 6463894 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:5517666
5', mRNA sequence.
BM471130.1 GI:18520172
BST.
Homo sapiens (human)
Homo sapiens
GCGGAAAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAAA 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 GCGGAAAACGCCATTGAAGATTCGATTCAGACATTTAAGATGGGAAAGCCCAGTAAAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol type="mRNA"
/db xref="taxon:9666"
/dclone="IMAGE:5517666"
/tissue type="leiomyosarcoma"
/lab host="DH10B (phage-resistant)"
/clone lib="NTH MGC 71"
/note="organ: uTerus; Voctor: pCMV-SPORT6; Site 1: Not1;
Site 2: Sall; Cloned unidirectionally. Primer: Oligo dT. Average insert size 2:1 kb. "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             247 TGTTGATATGGGCATCACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATT 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 TGTTGATATGGGCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    187 AATITIGACIGAACAAGACGIGAAIGGAGCAGTCTIGAAGIGGTTAAAAAAAGAACAICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCTCCTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCAAAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1062;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
52.6%; Score 814.2; DB 12; Length
Best Local Similarity 94.9%; Pred. No. 9.1e-136;
Matches 897; Conservative 0; Mismatches 38; Indels
                                                                                                                                                                                      ||||||||
1181 CCAAATAGT 1189
                                                                                                                                                            916
                                                                                                                                                            CCAAATAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                            1062
                                                                                                                1122
                                                                                                                                                            968
                                                                        908
                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                      RESULT 2
BM471130
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ⋩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ď
                                                          රි සි රි
                                                                   / Organism="Homo sapiens"
/ mol_type="mRNA"
/ mol_type="mRNA"
/ db xref="taxon:9606"
/ clone="CSOCA-BOO6FXC08"
/ tissue type="THYMUS"
/ clone lib="Homo sapiens THYMUS"
/ note="Vector: pcMVSPORT 6; 1st strand cDNA was primed
with a NotI-oligo(dT) primer. Five prime end enriched,
with a NotI-oligo(dT) primer. Five prime end enriched,
double-strand cDNA was digested with Not I and cloned into
the Not I and SCORV sites of the pcMVSPORT 6 vector.
Library was not normalized."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTAGCAATGAGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGGACT 1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTCATTTTGGAGTCAAAGACAAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACGAAT 1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              428 AAGGGTAAAGAGAACCCAGATAIGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGT 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | TACAAGTTGGATTTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGGTA 667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITAGCAATGAGGITITICCGAITTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACT 787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTCATTTTGGAGTCAAAGACAAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACAAT 847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATACCAAGGAAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGAC 907
                                                                                                                                                                                                                                                                                                                                                                                                                                                AGACTACTGGGTATCAGAATGGCAAAGCTACTTAACCTTCCAGAAAATACAGATGATTGG 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTCAGTTTGGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAATACAGATGATTGG 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAA 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACAAAGGGGA 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTIGATATGGGCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTG 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    462 GTTGATATGGGCATCACACATGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTG 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGGAAAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAT 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTCCTAAAGACCAAACTGTGTCTCAAAGGAACGTAGAGAAACTTCAAAGCAAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                762 CCATCCATAGACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCGATATCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTAAGTCACTAAAAGTTGAGCTCATAGAAGATAAAATAGATTATACAAAGGAAAGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCATCCATAGACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATGAATTCAAAGCCTTCACAAATACAGCAACAGCCACAGAAGAAGATGTCAAGATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                          Query Match 57.4%; Score 889; DB 13; Length 1200; Best Local Similarity 99.3%; Pred. No. 3.9e-149; Matches 903; Conservative 0; Mismatches 5; Indels 1;
         CS0AAW13ZH08QP1
              ..
         Avenue Genoscope sequence ID Location/Qualifiers
           Faraday
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       582
                                                                                                                                                                                                                                                                                                                                                                                                                                                     68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        308
                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원 상
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6 B 6 B 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             음
장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

ŝ

10;

9

ŝ

8 8

g ò g δ

ò

```
1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  153 AGTIGATITICAGAGCATITIAAAGCAGATITITAAAACACIGGCAGAGTCCAGAAAAGCAGC 1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACAGATTTGTT-ATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAATATGATTA 1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                     505
                                                                                                                                                                                                                                                                                                                                                                                                                                                              565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601 TTTCCAGATTAAAATGCAAACTTACAACAAAAAAAATATGGGGAACCAAAAGTTAAACACA 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rrereadgrarrrgegagaardggaacagreeracgaacarreegaagacraaag 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721 gradacirceccaacerracaceccaarrerraaacaerregecaareeccaaacaeace 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                            /tissue type="leiomyosarcoma"
/lab_host="DH10B (phage-resistant)"
/clone lib="NIH MGC 71"
/orde="organ: uterus; Vector: pCMV-SPORT6; Site_1: Not1;
Site_2: Sall; Cloned unidirectionally, Primer: Oligo dT.
Average insert size 2.1 kb.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 TGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGGATTTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 CGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTATTCATTTTGGAGTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   806 GACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGGAAGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            866 ATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCCAACAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1045 CTTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGG-----AACAAAGTAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCTCACTATTTGTGCGAG----ATGGGACCAGCTCTAAGGACATTACGAAAA----ATAA
                                                                                                                                                                                                                                                                                                                                                                                   447 ATATGGCTAATCC-GTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCACTAAAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                             ATATGGCTAATCCGGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCACTGAAAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                            626 CTACAGCCTGAAACAGGAACCAGGCAATCTCATTGATCCGATACATGAATTCAAAGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  686 ACAAATACAGCAAAGAGAAGAGGATGTCAAGATGAAATTTAGCAATGAGGTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361 GACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCCAATGATGATACCAAGGAACCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      926 AAGAAGIGCATICGAGAGCCAAGATITGIGGAAGITITACIGCCAAATAGIACTCTAICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481 AAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGGATTTTAGT
                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                 14;
                                                                                                                                                                                                                                                                                                              DB 10; Length
                                                                                                                                                                                                                                                                                                                                                 73; Indels
                                                                                                                                                                                                                                                                                                              39.8%; Score 617.2; DB 10;
89.3%; Pred. No. 1.4e-100;
cive 0; Mismatches 73;
                 20
                                                                                        /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:3914995"
http://image.llnl.gov
plate: LLAM9737 row: column:
High quality sequence stop: 637.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                     725; Conservative
                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                Query Match
Best Local Si
Matches 725;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     995
                                                     FEATURES
                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                        ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ठे
                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BB888763 972 Dp mRNA linear BST 20-OCT-2000 601513677F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914995 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              T--CTGAATGCCAATATGATTAC-TTCCAGATTAAAATGCAAAATT----ACAACAACA 1076
                                                                                                                                                                                                                                                                                              726
                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781 GCCCAATAGGACTCTATCTGACCAGATTTGTTATTGAAAGTGGACATTATTCCACGTTC 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCTGAAAGGCCAATATGATTACTTTCCGGATTAAAATGCCAAAATTTCCCCCCACCAA 900
                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                       786
                                                                                                                                                                                                                                                                                                                                                                                                                                              846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              996
                                     300
                                                                         546
                                                                                                          360
                                                                                                                                                909
                                                                                                                                                                                 420
                                                                                                                                                                                                                       999
                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TATICATITITGGAGTCAAAGACAAAACCCCATGGGAAAAITGTTGGCATCAAAGTCACCAA 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGATACCAAGGAAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGA 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.

1. (Dases 1 to 972)

NIH-MGC http://mgc.nci.nih.gov/.

National institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCs
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
                       TTACAAGTTGGATTTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGAT
                                                                                                                                                                                                                                                                                                ACATGAATTCAAAAGCCTTCACAAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAA
                                                                                                                                                                                                                                                                                                                        541 ATTTAGCAATGAGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGATACCCAGGAAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721 CCATCAAGTCCAACAAGCAAGGAGGTCCATTCGAGAGCCAAGAATTGTGGAAGTTTTACT
                                                                           TTCTAAGTCACTAAAAGTTGAGCTCATAGAAGATAAAATAGATTATACAAAGGAAAGGCA
                                                                                                      TICTAAGTCACTAAAAGTTGAGCTCACAGAAGATAAAAAAGATTATACAAAGGAAAGGCA
                                                                                                                                                ACCATCCATAGACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCGTATTCG
                                                                                                                                                                                                                         TTACAAGTTGGATTTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGAT
                                                                                                                                                                                                                                                                                                                                                                         ATTIAGCAATGAGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                              TATTCATTTTGGAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCATCAAGTCCAACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCAAATAGTACTCTATCTGA-CAGATTTGTTATTG-AAGTGGACATTATTCCACAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1077 AAATATGGGAACAAAGTAAAAATTCTCACTATTTGTGCGAGATG 1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rrargegeaaccaageraaaaaarrereeerrarrigegegaag 945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mRNA sequence. _____
BE888763
BE888763.1 GI:10345391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1025
                                       241
                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                         727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       296
                                                                         487
                                                                                                                                                547
                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                       607
                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                              787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 3
BE888763
```

g ò g

쉽 ò

엄

q

ò

g

 δ

ઠે

셤

ઠે

g à В

ઠે

480 619 540

ò

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Butheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (Dases 1 to 601)

E Kim, N. S., Hahn, Y., Oh, J. H., Lee, J. Y., Ahn, H. Y., Chu, M. Y., Kim, N. R., Oh, K. J., Cheong, J. E., Sohn, H. Y., Kim, J. M., Park, H. S., Kim, S. and Kim, Y. S.

21 Frontier Korean EST Project 2001

Unpublished (2002)

L Ontact: Kim YS

Genome Research Center

Korea Research Center

Korea Research Institute of Bioscience & Biotechnology

52 Ecun-dong Yuseong-gu, Daejeon 305-333, South Korea

Tell: +82-42-860-4470

Fax: +82-42-860-4470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /cell line="Choi-CK"
/lab host="Topl0F"
/clone lib="L14ChoiCKO"
/clone lib="L14ChoiCKO"
/note="Cogan: Liver: pT773-pac; Site_1: EcoBI;
/note="Cogan: Liver: pT773-pac; Site_1: EcoBI;
Site_2: NotI; The library was contributed by the Soares
laboratory and it was constructed as described by Bonaldo,
M.F., Lennon, G. and Soares, M.B. (1996), Genome Research
culture."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CB134607 EST 29-JAN-2003 K-EST0186079 L14ChoiCKO Homo sapiens CDNA clone L14ChoiCKO-13-G045, mRNA sequence.
                                                                                                                                                                                                                                                                            GCCTTCACAAATACAGCAACAGCCACAGAAGAAGATGTCAAGATGAAATTTAGCAATGAG 739
                                                                                                                                                                                                                                                                                                        87 TGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGGATGTAAATC
                                                                                                                            TTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCAAA
           CTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 38.8%; Score 601; DB 14; Length 601; Best Local Similarity 100.0%; Pred. No. 1.2e-97; Matches 601; Conservative 0; Mismatches 0; Indele (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .601

| Organism="Homo sapiens"

| mol_type="mRNA"

| db_xref="taxon:9606"

| clone="L14ChoiCK0-13-G04"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: Yongsung@mail.kribb.re.kr
Plate: 13 row: G column: 04
High quality sequence stops
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CB134607.1 GI:28100932
                                                                                                                                                                                                                                                                                                                                                                         740 GITITCCGATITGCIT 755
                                                                                                                                                                                                                                                                                                                                                                                                   GTTTTCCGATTTGCTT 616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bex="M"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CB134607
                                                                                                      260
                                                                                                                                                                                             620
                                                                                                                                                                                                                                                                                     680
                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
CB134607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                  셤
                                             g
                                                                                                                                                                              ò
                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                      ò
                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ingolstaedter Landstr.1, D-85764 Neuherberg, Germany
This is the 5' sequence of the clone insert
Clone from S. Wiemann, Molecular Genome Analysis, German Cancer
Research Center (DKFZ): Email s.wiemann@dkfz- heidelberg.de;
sequenced by AGOWA (BerlinfGermany) within the cDNA sequencing
consortium of the German Genome Project.
No sl sequence available.
This clone (DKFZ)686B092) is available at the RZPD in Berlin.
Please contact the RZPD: Ressourcencentrum, Heubnerweg 6, 14059
Berlin-Charlottenburg, GERWANY; Email: clone@rzpd.de.
Location/Qualifiers
Location/Qualifiers
Location.e.Huomo.sapiens"
                                                                                                                       616 bp mRNA linear EST 04-SEP-2003
DKEZp686D092 r1 686 (synonym: hlcc3) Homo sapiens cDNA clone
AL603127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCACTA 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               320 ATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAATGCTCCTAAAAGAC 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181 ATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTAAAAGAC 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           440 AACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCACTA 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  260 ATCACACATGGACCAGCTATTCAAATAGAACTATTCAAAGAATTGCGGAAAACAGCC 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 ATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAGC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GTAAATCCGTGGTTAGAAAGTCATAAGATTGACCAAAAAACACAGGAAATTTTGACTGAA 60
                                                                                                                                                                                                                                                                                                                         Eukaryota.

Mammalia, Butheria, Primates, Craniata, Vertebrata, Buteleostomi,

Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.

1 (Dases I to 616)

Wambutt, R., Heubner, D., Mewes, W., Weil, B. and Wiemann, S.

EST (Wambutt, R., Heubner, D., Mewes, H.W., Weil, B. and Miemann, S.)

Contact: MIPS

MIPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone_lib="686 (symonym: hlcc3)"
/note="Yector: pTriplEx2; Site_1: SfilA; Site_2: SfilB;
cDNA-collection"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 CAAGACGTGAATGGAGCAGTCTTGAAGTGGGTTAAAAAAGAGAACATCTTGTTGATATGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            140 GTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAAACACAGGGAAATTTTGACTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ch 39.7%; Score 614.4; DB 9; Length 616; all Similarity 99.8%; Pred. No. 5e-100; 615; Conservative 0; Mismatches 1; Indels 0;
1213 AGAAGAAAATTCAGAGCAAAAAACAAATAAAA 1244
                            781 GACAAAATCTCCGCAGAGAAATTAAACAAGA 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="DKFZp686D092"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /dev_stage="ādult"
/lab_host="DH10B"
                                                                                                                                                                                                                                               AL603127.1 GI:15166633
                                                                                                                                                                                                                                                                                        Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local
Matches 61
                                                                                                           RESULT 4
AL603127
LOCUS
DEFINITION
                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
```

ö

୪୍ ବ

원 $\dot{\varsigma}$ ద d

ö

a

ઠે

ò

ö

9 94 180

154

214 240 274

120

음 상 음

ò

ઠે ቴ ቴ සි දි g ઠે d δ g Š ద ઠે ద ò 셤

```
CB123846 538 bp mRNA linear EST 29-JAN-2003 K-EST0172359 L10ChoCKO Homo sapiens CDNA clone L10ChoCKO-31-D07 5', mRNA sequence.
CB123846 GI:28083454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EST.

Homo sapiens (human)

Homo sapiens

Homo sapiens

Eukaryota; Merazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Eukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

I (bases 1 to 538)

I (bases 1 to 538)

Oh, K.J., Hahn, Y., Oh, J.H., Lee, J.Y., Ahn, H.Y., Chu, M.Y., Kim, M.R., Oh, K.J., Choong, J.E., Sohn, H.Y., Kim, J.M., Park, H.S., Kim, S. and Kim, Y.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241 ACATCTTGTTGATATGGGCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421 AAAACAAAAGGGTAAAGAGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAATTGCGGAAAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAGCCCAG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 395 TAAAAATGCTCCTAAAGACCAAACTGCGTCTCAAAAGGAACGTAGAGAAACTTCAAAGGA 454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          515 TAAAGGTICTAAGTCACTAAAAGCCGAGCTCATAGAAGATAAATAGATTATATACAAAGGA 574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .611

Organism="Homo sapiens"

Organism="Homo sapiens"

(db xref="taxon:9606"

(clone="DKP2p696901165"

(dev stage="adult"

(lab host="DH10B"

(clone lib="668 (synonym: hlcc3)"

fnote="vector: pTriplEx2; Site_1: SfilA; Site_2: SfilB; CDNA-collection"
                                                                                                                                                                                                                                                                                                                                                          61 ATTIGCAAGACTACTGGGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                  181 TAAAGGITCTAAGTCACTAAAAGTTGAGCTCATAGAAGATAAAATAGATTATACAAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         215 CAGGGAAATTTTGACTGAACAAGACGTGAATGGAACAGTCTTGAAGTGGTTAAAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGATTGGACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACA
                                                                                                                                                                                                                                                                                                        35 AACACATCAGATATTTTCAGCACTAAAAGAGATGGTTTTCCCCACATATATGTAAAAGAA
                                                                                                                                                                                                                                                                                                                                                                             361 TAAAAATGCTCCTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCA
                                                                                                                                                                                                                                                                                     AACACATCAGATATTTTCAGCACTAAAAGAGATGGTTTTCCCCCACATATATGTAAAAGAA
                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                611;
                                                                                                                                                                                                                13; Length
                                                                                                                                                                                                            Query Match 36.8%; Score 570.6; DB 13; Length Best Local Similarity 99.3%; Pred. No. 3.3e-92; Matches 573; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        335
                                                                                                                                                                                                                                                                                                                                                                                               93
                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 7
CB123846
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           四次 四次 四次 四次
                                                                                                                                                                                                                                                                                                                                                        ठ
                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            જ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      611 bp mRNA linear EST 04-SEP-2003
DXF2p686P01165_r1 686 (synonym: hlcc3) Homo sapiens cDNA clone
DXF2p686P01165_5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                               ATATGECTAATCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCACTAAAAGTTG 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 ATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTAAAGACCAAACTG 300
                                                                                                                                                                                                                                                                                                                                               301 TGTCTCAAAAGGAACGTAGAGAAACTTCAAAGGAAAACAAAACGAAAAGGTAAAGAGAACCCAG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                     ATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGGGGAAAACAGCCATTGAAG 240
                                                                                                                                                                                                                                                   ATTCGATTCAGACATCTAAGATGGGGAAAGCCCGGTAAAAATGCTCCTAAAGACCAAACTG 386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAGCCATTGAAG 326
                                                                                                                                                                                                                                                                                                                          TCTCTCAAAAGGAACGTAGAAACTTCAAAGCAAAAACAAAAGGGTAAAGAGAACCCCAG 446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens

Busaryota, Metazoa, Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (base 1 to 611)

Babr, A., Lauber, J., Mewes, H.W., Weil, B., Amid, C., Osanger, A.,

Fobo, G., Han, M. and Wiemann, S.

EST (Bahr, A., Lauber, J., Mewes, H.W., Weil, B., et al.)
                                    AGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACTGAACAAGACG 206
TGCCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGGATGTAAATC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tigolstaedter Landstr.1, D-85764 Neuherberg, Germany
This is the 5' sequence of the clone insert
Clone from S. Wiemann, Molecular Genome hallysis, German Cancer
Kesearch Center (DKFZ); Email s. Wiemann@dkfz- heidelberg, de;
sequenced by Qiagen (Hilden/Germany) within the cDNA sequencing
consortium of the German Genome Project.
This clone (DKFZp686F01165) is available at the RZPD in Berlin.
Please contact the RZPD Ressourcenzentrum, Heubnerweg 6, 14059
Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GIGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGGATTTTAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481 GTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACGTTACAAGTTGGATTTTAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BX473904.1 GI:31668147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: MIPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C 687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                147
                                                                    61
                                                                                                                                                                              267
                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                   327
                                                                                                                                                                                                                                                                                                                          387
                                                                                                                                                                                                                                                                                                                                                                                                 447
                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 6
BX473904
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
```

514

φ

```
1. .960
/organise="HOmo sapiens"
/mol_type="mRNA"
/db_xref="texon:9606"
/dlone="texon:9606"
/clone="texon:9606"
/clone lib="HFYMUS"
/clone lib="HOmo sapiens THYMUS"
/clone lib="HOmo sapiens THYMUS"
/clone lib="HOmo sapiens THYMUS"
/clone lib="texon: pcMVSPORT 6; lst strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoNY sites of the pcMVSPORT 6 vector.
Library was not normalized."
                                                                                                                                                                                                                                                                                                                                                                Contact: Genoscope
Genoscope - Centre National de Sequencage
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: seqrefégenoscope.cns.fr, Web : www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 4292.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSOQAP006BF04QP1&cluster=4292.r. Contact :
Feng Liang Email : fliang@lifetech.com URL :
http://fullength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSOCAP006BF04QP1.
BX457116 Homo sapiens THYMUS Homo sapiens cDNA clone CSOCAP006YK08
5-PRIME, mRNA sequence.
BX457116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 128 ACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAAACACAGGGAA 187
                                                                                                                                                                                                      Craniata, Vertebrata, Euteleostomi,
Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    359 ACAAAAGGATGTAAATCAGKGGTTAGAAAGTCATAAGATGACCAAAAACACAGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTTGATATGGGCATCACACAT-GGACCAGCTATTCAAATAGAAGAACTATTCAAAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       599 ATGCTCCTAAAGGACCAAAACTGTGTCTCAAAAGGAACGTAGAGAACTTCAAAGCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          68 AGACTACTGGGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAAAGGGTAAAAGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               188 ATTITGACTGAACAAGACGTGAATGGAGCAGTCTTGAAGTGGTTAAAAA-AAGAACATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGCTCCTAAAGACC-AAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAAGCAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 960;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 34.3%; Score 531; DB 13; Length 9
Best Local Similarity 93.2%; Pred. No. 3.5e-85;
Matches 573; Conservative 22; Mismatches 16; Indels
                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Verte
Mammalia, Eutheria, Primates, Catarrhini, Hon
1 (bases 1 to 960)
Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
Unpublished (2001)
                                                                                           BX457116.1 GI:31030860
                                                                                                                                              Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               425
                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
              DEFINITION
                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ठ व ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /cell line="Cho-CK"
| Jab host="Top10F" |
| /clone lib="LiOChoCKO" |
| /clone lib="LiOChoCKO" |
| /clone lib="LiOChoCKO" |
| /clone lib="LiOChoCKO" |
| /clone lib="LiOChoCKO |
| /clone lib="LiOChoCKO |
| /clone lib="Lib="Liocho" |
| /clone lib="Liocho"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAGAAGAACTATTCAAAGAATTGCGGAAAACAGCCATTGAAGATTCGATTCAACACTCT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 AGTGGTTABAAAAAGAACATCTTGTTGATATGGGCATCACACATGGACCAGCTATTCAAA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       345 AGATGGGAAAGCCCAGTAAAATGCTCCTAAAGACCAAACTGTGTCTCAAAAGGAACGTA 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAAACTTCAAAGCAAAAACAAAAGGGTAAAGAGAACCCAGATATGGCTAATCCGTCTG 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 GAGAAACTTCAAAGCAAAAACAAAAAGGGTAAAAGAGAACCCAGATATGGCTAATCCGTCTG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAGATTATACAAAGGAAAGGCAACCATCCATAGACCTGACATGTGTATCATATCCATTTG 584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361 TAGATTATACAAAGGAAAGGCAACCATCCATAGACCTGACATGTGTATCATATCCATTTG 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGAATTCAGTAATCCATATCGTTACAAGTTGGATTTTAGTCTACAGCCTGAAACAGGAC 644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGAATTCAGTAATCCATATCGTTACAAGTTGAATTTTAGTCTACAGCCTGAAACAGGAC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAATGAGTACAACTGCTAAAGGTTCTAAGTCACTAAAAGTTGAGGCTCATAGAAGATAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 AGATTGACCAAAAACACAGGGAAATTTTGACTGAACAAGACGTGAATGGAGCAGTCTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGGTTAAAAAAAAAACATCTTGTTGATATGGGCATCACACATGGACCAGCTATTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAGAAGAACTATTCAAAGAATTGCGGAAAACAGCCATTGAAGATTCGATTCAGACATCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 165 AGATTGACCAAAAACACAGGGAAATTTTGACTGAACAAGACGTGAATGGAGCAGTCTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
  21C Frontier Korean EST Project 2001
Unpublished (2002)
Contact: Kim YS
Genome Research Center
Korea Research Institute of Bioscience & Biotechnology
S2 Eceun-dong Yuseong-gu, Daejeon 305-33, South Korea
Tel: +82-42-860-4470
Fax: +82-42-860-4470
Fax: +82-42-860-4470
Fax: +82-42-860-409
Fmail: yongsung@mail.kribb.re.kr
Plate: 31 row: D column: 07
High quality sequence stop: 538.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 538;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   34.7%; Score 538; DB 14;
100.0%; Pred. No. 2.3e-86;
Live 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                      organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="L10ChoCK0-31-D07"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 100.
Matches 538; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /sex="M"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
        TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 8
BX457116
LOCUS
                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 6 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

ò

8

4

4; Gaps

246 478 365

658 484 485. GGTTCTAAGTCACTAAAAGTTGAGCTCATAGAAGATAAAATAGATTATACAAAGGAAAGG 544

22-MAY-2003

EST

linear

đq 960

BX457116

g ò g ò ద

Š

```
Koya,S., Kurihara,C., Matsuyama,T., Miyazaki,A., Murata,M., Nakamura,M., Nishi,K., Nomura,K., Numazaki,R., Ohno,M., Ohsato,N., Okazaki,Y., Saito,R., Saitoh,H., Sakai,K., Sakazume,N., Sano,H., Sasaki,D., Shibata,K., Shinagawa,A., Shiraki,T., Sasaki,D., Shibata,K., Shinagawa,A., Shiraki,T., Tagami,M., Tagawa,A., Takahashi,F., Takaku-Akahira,S., Muramatsu,M. and Hayashizaki,Y. Tomaru,A., Towaru,A., Takahashi,F., Takaku-Akahira,S., Direct Submission

AL Sibmitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN) Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suchiro-cho, Tsurumi -ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-reseascriken.go.jp, URL:http://genome-gsc.riken.go.jp/, Tel:81-45-503-9222, Fax:81-45-50-9216)

cDNA library was prepared and sequenced in Mouse Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues.

Please visit our web site for further details.

URL:http://fantom.gsc.riken.go.jp/.
URL:http://fantom.gsc.riken.go.jp/.
URL:http://fantom.gsc.riken.go.jp/.
URL:http://fantom.gsc.riken.go.jp/.
URL:http://fantom.gsc.riken.go.jp/.
URL:http://fantom.gsc.riken.go.jp/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            caaaadacacaaacaaagaccaaaaargaggaagaaaaacricagricarccaacagrg 673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           312 AAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAATGCTC 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGATGTAAATCAGTGGTT---AGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 437 igitcaaagaagaraacaggatgatcigcigcagaattaactgaagaggatcitagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATATGGGCATCACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              497 AAATGGGCTTGCCACGGGGTCCAGCACTTCTGATAAACGCATGTATAACAAA---CTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           554 TTÁGTTCCCCTGÁAAGTCACAATCAAGATTCCAGAGAATTAAATGATAAAAAACTCTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               372 CTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAAGCAAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           257 İTTITICCITITIAAACGAİTITİTİANGAAGAAAİTITGAAAATITGGGGAATAAATIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            317 GAAGCTTGAACATGAGTGGACAAGTAACTCAACCAAAATTGATCAAAGACTGGACCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITCAGGACTAAAAGAGATGGTTTTCCCCACATATATGTAAAAGAAATTTGCAAGACTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                weakly similar to CDNA FLJ20073 FIS, CLONE COL02320 sapiens] (SPTR Q9NXS8, evidence: FASTY, 50.4%ID, 71.7%length, match=1341)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 3953;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tch
31.6%; Score 489.6; DB 11; Length
al Similarity 61.9%; Pred. No. 6.3e-78;
962; Conservative 0; Mismatches 549; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="putative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loca
Matches
                                                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The FANTOM Consortium and the RIKEN Genome Exploration Research Group Phase I & II Team.
Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
Nature 420, 563-573 (2002)
6 (bases I to 3953)
Adachi, J., Azawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Harana, A., Hashizume, W., Hiramoto, K., Hiramoto, K., Hiramoka, T., Hirozane, T., Hori, F., Imocrani, K., Ishi, Y., Indotani, K., Ishi, Y., Ishi, Y., Koddo, S., Konno, H., Kaukawa, T., Katoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M., Sumi, M., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsunoto, H., Sakaguchi, S., Ikgami, T., Kashiwagi, K., Pujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y. RIEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HTC 20-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                   CAACCATCCAWAGACCTGACATGTGTWTCATAWCCATTTGAAGAAWTCAGTAATCCATAT 838
                                                                                         CAACCATCCATAGACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCATAT 604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus 13 days embryo lung cDNA, RIKEN full-length enriched library, clone:D430044G20 product:weakly similar to CDNA FLJ20073 AK052535. G1:26095242 AK052535.1 G1:26095242 HTC; CAP trapper.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The RIKEN Genome Exploration Research Group Phase II Team and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Functional annotation of a full-length mouse cDNA collection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Carninci, P. and Hayashizaki, Y.
High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
99279253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                3953 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nature 409, 685-690 (2001)
                                                                                                                                                                                                                                                                                                                                         898 RAAAAAAAAAA 912
                                                                                                                                                                                                                                                                                            665 ATACATGAATTCAAA 679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FANTOM Consortium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20499374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10349636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1076861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AK052535
                                            719
                                                                                                                                         779
                                                                                              545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 9
AK052535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
```

TITLE

TITLE

TITLE

Mon Apr

```
Ношо
                                                                                                                                                                                                                                                                               Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    867
           1736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                         ACCESSION
                                                                               RESULT 10
                                                                                                    AL701060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1259 ATATGTCAAGAAAGTATTTCTACATTATGATGCAAAGTAGCACAGGCAAAACATGGAAA 1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATCCCAACCAACGGATAGAGAGTTCAAGAAATTTCTAGAGGATTTAAAGATGTGGACA 1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1439 ecercraciananaececcenenananancrracianceranc---ranganangaecan 1495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGACCAAAGTTGGTTAAATTATTGACAGGAAATCAAGATTTGTTAGATAATTCATACTAT 1315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATTGGTACATTCTTGTAACAAATACCTGTGCACCCAACTCAATTAGAGCACTTAGAGTTC 1615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GIGGICAAAGCITACAAAGAAAAGCCGAGIAGCAAACCITCACITICCAAGIGIATAIGIA 1495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            grada de caracida de contrator de caracida de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator de contrator d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAAGTAAAAATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAA 1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----AATATATCTTTGTTAACCATTTCAACAATGATCACGAAGTATTTTGAAGACA 1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         848
                                                                                                                         786
                                                                                                                                                                   611
                                                                                                                                                                                                                844
                                                                                                                                                                                                                                                          668
                                                                                                                                                                                                                                                                                                845 TAGAACÁTTCTÁTTCTACGTGTTGCTGAGACÁGGCCACTCAATCTCATTGACCCAATAC 904
                                                                                                                                                                                                                                                                                                                                              728
                                                                                                                                                                                                                                                                                                                                                                                           964
                                                                                                                                                                                                                                                                                                                                                                                                                                   788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  909 ATCAAGTCCAACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGT-TTTACTG 967
                                                                               551
                                     674 arcardencerchaggadaada-----decagaargaadaaadaaaaddaagrerradg 726
GTAAAGAGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTA 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGAAGGAAATTAAATGGTTTGCTGTATTGGAGTTTGATCCTGAGTCTAACATGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGACTAAAACTGTCTAAACTTTTGACCAGACACCAAGGCTCACTTGATGAATCTTACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAATGCCAATATGATTACTTCCAGATTAAAATGCAAAATTACAACAAAATATGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1148 AAT-----AAAGTIGATITCAGAGCATITAAAAGCAGATITIAAAACACTGGCA
                                                                                                                                                                                                                787 GAÁCAGÁ - TGTCTTGCACGCCÁTÁCCCTTTTTGÁTTCTTTTTTTGTGATGTCAÁACAATÁCÁ
                                                                                                                                                                                                                                                                                                                                                 ATGAATTCAAAGCCTTCACAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAAT
                                                                                                                                                                                                                                                                                                                                                                        Traggaartroceartrocagoscriciaticaartrocearcas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCATTTTGGAGTCAAAGACAAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATACCAAGGAAGCCCTCATTAACCATTTCAATCTGATAAACAAGTATTTTGAAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAAATAGTACTCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCT
                                                                                                                       aaagaaaacatgttaggtgatgtggtgactaaagacatggaagataataagcccaaacca
                                                                                                                                                                      552 CCATAGACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACA
                                                                                                                                                                                                                                                            612 AGTIGGATITIAGICIACAGC - - CIGAAACAGGACCAGGCAAICTCATIGAICCGAIAC
                                                                                                                                                                                                                                                                                                                                                                                                                                     TTAGCAATGAGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTA
                                                                               AGTCACTABAAGTTGAGCTCATAGAAGATAAAATAGATTATACAAAGGAAAGGCAACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1496 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1088
                                                                                                                            727
                                                                                                                                                                                                                                                                                                                                                                                             905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             968
                                                                                                                                                                                                                                                                                                                                                   699
                                                                                                                                                                                                                                                                                                                                                                                                                                       729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 6 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ል ያ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Op
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \stackrel{\triangleright}{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                          g
g
                                                                                                                                                                                                                                                                                                                                              8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ठ
                                                                                                                                                                                                       g
                              셤
                                                                          \dot{\delta}
                                                                                                                셤
                                                                                                                                                            ò
```

```
ACAGAITITGITAITGAAGIGGACATIAITCCACAGITCICTGAAIGCCAAIAIGAITACI 1046
                                                                                                                                                                   mRNA linear EST 04-SEP-2003
hlcc3) Homo sapiens cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ñ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ingolstaedter Landstr.1, D-85764 Neuherberg, Germany
This is the 5' sequence of the clone insert
Clone from S. Wiemann, Molecular Genome Analysis, German Cancer
Research Center (DKPZ); Email s.wiemann@dkfz-heidelberg.de;
sequenced by MediGenomix (Martinsried/Germany) within the cDNA
sequencing consortium of the German Genome Project. No sl sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 GATTIGCATCAGCTIGIATGAATICACGCACCAATGGCACCAICCATTITGGAGTCAAGG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGAAGTGTATTCGGGAGCCAAGGTTTGTGGAAGTCCTTCTGCAGAACAATACACCATCTG 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                             Euteleostomi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATTIGCTICAGCTIGTATGAATTCACGTACCAATGGCACTATTCATTTTGGAGTCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAAACCCCATGGGAAAATTGTTGGCATCAAGTCACCAATGATACCAAGGAAGCCCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTAACCATTTCAATCTGATAACAAGTATTTTGAAGACCATCAAGTCCAACAAGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     treaccactricaarcraarcaaaaadrartrireaagaagreagacarcaargaaacca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This clone (DKrzp686114120) is available at the RZPD in Berlin. Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 14055 Berlin- Charlottenburg, GERMANY; Email: clone@rzpd.de. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               acaaaccccarddagaarricrricgreficaaaarcaccagr-----aaddcroccrrica
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGAAGTGCATTCGAGGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAAATACAGCAACAGCACAGAAGAGAGGATGTCAAGATGAAATTTAGCAATGAGGTTTTCC
                                                1786
                                                                                                                                                                                                                                                                                                                                                                     Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleost Bamanalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 762)
Ottenwaelder, B., Obermaier, B., Mewes, W., Mewes, H.W., Weil, B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (Ottenwaelder, B., Obermaier, B., Mewes, H.W., Weil, B. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone lib="686 (synonym: hlcc3)"
/note="Vector: pTriplEx2; Site_1: SfilA; Site_2:
cDNA-collection"
18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 762;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 433.6; DB 9;
Pred. No. 9.3e-68;
0; Mismatches 169;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="DKF2p686114120"
                                                                                                                                                                         AL701060

DKFZp686114120_rl 686 (synonym: hpwsp686114120_s', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /dev_stage="adult"
/lab_host="DH10B"
                                                                                                                                                                                                                                                          AL701060
AL701060.1 GI:19621593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 75.4%;
Matches 573; Conservative
                                                                                                                                                                                                                                                                                                                               sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: MIPS
                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wiemann, S.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wiemann, S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           available
          1496
          ઠ
```

ઠે

ò g ઠે g ઠે g

ઠે 셤 ò g ò

```
CD706751.1 GI:32237381
                                                                                                                   26.8%;
al Similarity 92.8%;
491; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: YiXin Zeng
Cancer Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      428
                                                                                                                                                                                                                                                                                                                                                                                            308
                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                          68
                                                                                                                                                                                                                                                                                  188
                                                                                                                                                                                                                                                                                                                                        248
                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                  368
                                                                                                                      Query Match
                                                                                                                                   Best Local
Matches 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 12
CD706751
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                g
                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                     ₹
                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /tissue type="mbryonal carcinoma"
/lab hosp="DH10B (T1 phage-resistant)"
/lab hosp="DH10B (T1 phage-resistant)"
/loone lib="NH1 MGC (61"
/note="Organ: testis; Vector: pDNR-LIB (Clontech); Site_1:
Sfil (ggccgcctcggcc); Site_2: Sfil (ggccattatggcc);
Double-stranded cDNA was prepared from cell line RNA . S'
and 3' adaptors were used in cloning as follows: 5'
adaptor sequence: S'-CACGGCCATTATGGCC-3' and 3' adaptor
                                                                                            1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                               BG615970 768 bp mRNA linear EST 18-APR-2001
602643421F1 NIH_MGC_61 Homo sapiens CDNA clone IMAGE:4774373 5',
                                        TCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAAAATTCTCAG 1106
                                                                                                                                               1155 TTGATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGCAG 1214
                                                                                                                                                                                                    1275 TATTGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAA 1334
                                                                                                                                                                                                                                                                                                              1335 CAAATAAATGCCACCCAGATCAAACAAACACTTAGATTTCCTGAAGGAAATTAAATGGT 1394
                                                                                                                                                                                                                    714
                                                                  414
                                                                                                                     415 TGTTTGTAAGAGAAGGGGTAGCTCTAGGGATATCCTGGCCAATTCCAAGCAACGGGATG 474
                                                                                                                                                                                                                                                                                  595 TTCTCATAGGAAACCGAGACTCACTGGATAATTCATACTATGACTGGTACATTCTTGTAA 654
ACAGATTTGTCATTGAAGTTGATATTATTCCAAAACACTCTATATGTAATGATAAAGATATT 354
                                                                                                                                                                          475 TAGATTICAAGGCATTITTACAAAATTTAAAGTCACTGGTAGCATCTAGAAAAGAGGCTG
                                                                                                                                                                                                                                                                                                                              355 TCTACATTCAGATGCAAATTTGTAAAGATAAGATATGGAAACGAAAACCAAAATCTTTCAC
                                                                                                                                                                                                                                                                                                                                                                   1395 TTGCTGTATTGGAGTTTGATCCTGAGTCTAACATCGATGG 1434
                                                                                                                                                                                                                                                                                                                                                                                   TIGCTGTGTTGGAGTTTGATCTGAATCTATGATCAATGG 754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:4774373"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mRNA sequence. _ _ BG615970
BG615970.1 GI:13667354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                         655
                                                                                                                                                                                                                                                                                                                                                                                            715
                                        1047
                                                                                            1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                   BG615970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
```

```
CD706751 602 bp mRNA linear EST 25-JUN-2003 EST23278 human nasopharynx Homo sapiens cDNA, mRNA sequence. CD706751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 482
                                                                                                                                                                                                                                                                                                                                                                                                    299
                                                                                                                                                                                                                                                                                                                                                                                                                                                         187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. [Liu. X.-0.] Liu. X.-0., Zhou, Y., Zhang, L.-J., Xu, H., Chen, H.-K., Pan, Z.-G. and Zeng, Y.-X.
sequence: 5'-ATTCTAGAGGCCGAGGGGGCCGACATG-dI(30)BN-3' (where B = A, C, or G and N = A, C, G, or T). Average insert size 1.75 kb (range 0.9-4.0 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboracories (Palo Alto, CA). Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTTGATATGGGCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTTGATATGGGCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGGAAAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTCCTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAAACTACAAAAGCAAAAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300 ACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGAAAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540 GCTCCTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAAGCAAAAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGGGT-AAAGAGAACCCAGATAT-GGCTAATCCGTCT-GCAATGAGTAC-AACTGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  483 AAGGTTCTAAGTCACTA--AAAGTTGAGCTCATAGAAGATAAAATAGATTATACAAAGGA
                                                                                                                                                                                                                                                                                                                                                        AGACTACTGGGTATCAGAATGGCAAAGCTAACCTTCCAGAAAATACAGATGATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                         128 ACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAAACACAGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Transcriptional Gene Expression Profile of Human Nasopharynx
Unpublished (2003)
                                                                                                                                                                                                                                                                                                    7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 415.4; DB 12; Length 768; Pred. No. 1.7e-64; 0; Mismatches 31; Indels 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541 AAGGCAACCATCCATAGACCTGACATGTGTATCATATCCATTTGATGAA 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sun Yat-sen University
651 DongFeng Road East, GuangZhou 510060, China
Tel: 86-11380-9770-743
Email: yxzeng@gzsums.edu.cn.
```

```
/ Mod_type="maxwa"
/ mod_type="maxwa"
/ mod_type="maxwa"
/ doracle="maxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle="waxwa"
/ doracle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    981 TATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAATATG 1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361 cccrcarreaccacrrcaarcrearearearecacrarrireagerccarcaacaac 302
strand cDNA and therefore this may represent a bonafide poly A tail. The sequence tag present in the cDNA between the Notl site and the oligo-dT track served to identify it as a clone from the normalized Eye library CDNA Library Preparation: M.B. Soares Lab Clone distribution: clones will be available through Research Seq primer: M13 Forward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 CATCTAATAAATTTGTTATTGAGGTGGATATCATTCCACAATATTCAGAATGCAAAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1101 TCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1161 TCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAAAGCAGCAGAAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1041 ATTACTTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 ATTTCTTCCAAATAAAATGGATTGGCATAAGGATGAAAAATGCCAACAAATTCCAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTTCACAAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAATTTAGCAATGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541 CCTTAACAAACACAGAGACACCCACAGAGGAGACATAAAGATGAAATTTAGCAACGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITICCGATITIGCTICAGCITGIAIGAATICACGIACCAAIGGCACIAITCAITITIGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rerrecearridecricaderrerareacricaceracraarescacearreares
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rccaagacaaaaccccaaggaaggarrdriggcarggagcrcaccaccacaaaaaarg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301 AAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 ACTOGGTCTTTGTGAGAGATGGTCCGAAAAGTAAGGACATCATAGGGAATAAAGCTGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 541;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23.8%; Score 368.2; DB 10;
80.0%; Pred. No. 4.8e-56;
ive 0; Mismatches 108;
                                                                                                                                                                                                                                                                                        /organism="Rattus norvegicus"
                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAG_TISSUE=Eye
TAG_LIB=UI-R-BU0
TAG_SEQ=CATTG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 433; Conservative
                                                                                                                                                                                                                                                          . .541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1221 A 1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGAAAACAGCCATGGAAGATTCGATTCAGACATCTAAGATGGGAAAAGCCCAGTAAAAT 510
                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTGATATGGGCATCACACACGACCACCATTCAAATAGAAGAACTATTCAAAGAATGG 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GITGATATGGGCATCACACGTGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTG 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      271 ACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATCGACCAAAAACACAGGGAA 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGGAAAACAGCCATTGAAGATTCGAATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAT 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTCCTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCAAAAACAA 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGICAGITIGAGAITGAGAAAGCAACITAACCITCCAGAAATACAGAIGAICGG 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAA 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: bento-soares@ulowa.edu
The sequence contained an oligo-dT track that was present in the
oligonucleotide that was used to prime the synthesis of first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear EST 06-MAR-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGACTACTGGGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGGTTGG
                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                nasopharynx cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (bases 1 to 541)
Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate
                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                            Length 602;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEBRF, Iowa City, IA 52242,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Soares, MB
Coordinated Laboratory for Computational Genomics
                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                               /mol_type="mRNA"
/db_xref="taxon:9606"
/tissue_type="normal nasopharynx"
/clone_lib="human nasopharynx"
/note="ESTS generated from a normal
library_from southern Chinese"
                                                                                                                                                                                                                                                                                                                            14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AW532890 S41 bp mRNA UI-R-BUO-ang-d-03-0-UI.sl UI-R-BUO Rattus UI-R-BUO-ang-d-03-0-UI 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                         Score 377.6; DB 1. Pred. No. 9.9e-58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      428 AAGGGTAAAGAGAACCCAGATATGGCTAATCC 459
                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Genome Res. 6 (9), 791-806 (1996)
                                                                             organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rattus norvegicus (Norway rat)
Rattus norvegicus
                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             University of Iowa 375 Newton Road , 4156 Tel: 319 335 8250 Fax: 319 335 9565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AW532890.1 GI:7175304
                                                                                                                                                                                                                                                                                                                         24.48;
                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  discovery
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AW532890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7044477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8889548
                                                                                                                                                                                                                                                                                                                                                                                  Matches 383;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 451
                                                                                                                                                                                                                                                                                                                                                                                                                                       89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     391
                                                                                                                                                                                                                                                                                                                               Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AW532890/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                               Query |
Best Lo
                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                         ORIGIN
```

a a

g ð g Š

g

ਨੇ

a ઠે

ठ

g

ઠે

ઠે

ö

740 482 800 860

362

422

1220

N

1160

62

122

1100

182

980

242

. ДС ,

```
1070 AACAACAAAATATGGGAACAAAGTAAAAATTCTCACTATTTGTGCGAGATGGGACCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .572
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="DXFZp686H08165"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone lib="686 (synonym:
/note="Vector: pTriplEx2;
cDNA-collection"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /dev_stage="adult"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BX473839.1 GI:31668083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                         1358 ACAAAACACT 1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                655 AATAAGCACT 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: MIPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
BX473839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                ď
                                                                                                           d
                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                         ò
                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                        à
                                                                            ò
ਨੇ
                                                                                   AL700018

664 bp mRNA linear BST 04-SEP-2003

DKFZp686010116 r1 686 (synonym: hlcc3) Homo saplens cDNA clone
DKFZp686010116 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITGTGGAAGTITTACTGCCAAATAGTACTCTATCTGACAGATTTGTTATTGAAGTGGAC 1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1010 ATTATTCCACAGTTCTGAATGCCAATATGATTACTTCCAGATTAAAATGCAAAATTAC 1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCACGCACCAATGGCACCATCCATTTTGGAGTCAAGGACAAACACCATGGAGAAATTGTT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCATCAAAGTCACCAATGATACCAAGGAAGCCCTCATTAACCATTTCAATCTGATA 889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        890 AACAAGTATTTTGAAGACCATCAAGTCCAAGAAGGAAGAGGCATTCGAGAGCCAAGA 949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 235 TTTGTGGAAGTCCTTCTGCAGAACAATACACCATCTGACAGATTTGTCATTGAAGTTGAT 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACTATTCCAAAACCACTCTATATGTAATGATAAGTATTTCTACATTCAGATGCAAATTTGT 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTGTGAAAATCACCAGT-----AAGGCTGCCTTCATTGACCACTTCAATGTAATGATC 174
                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 664)
Duesterhoeft, A., Lauber, J., Mewes, H.W., Gassenhuber, J. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                        Ingoleraedter Landstr.1, D-85764 Neuherberg, Germany
This is the 5' sequence of the clone insert
Clone from S. Wiemann, Molecular Genome Analysis, German Cancer
Research Center (DKFZ); Email s.wiemann@dkfz-heidelberg.de;
sequenced by Qiagen (Hilden/Germany) within the cDNA sequencing
consortium of the German Genome Project.
This clone (DKFZp68601016) is available at the RZPD in Berlin.
Please contact the RZPD Ressourcenzentrum, Heubnerweg 6, 14059
Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hlcc3)"
Site_1: SfiIA; Site_2: SfiIB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGGATGTCAAGATGAAATTTAGCAATGAGGTTTTCCGATTTGCTTCAGCTTGTATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGGACATTAAGATGAAATTCAGCAATGAAGTCTTCCGATTTGCATCAGCTTGTATGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCACGTACCAATGGCACTATTCATTTTGGAGTCAAAGACAAACCCCATGGGAAAATTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  175 AAAAAGTATTTTGAAGAAAGTGAGATCAATGAAGCCAAGAAGTGTATTCGGGAGCCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels 18; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 23.2%; Score 358.6; DB 9; Length 664; Best Local Similarity 73.4%; Pred. No. 2.4e-54; Matches 492; Conservative 0; Mismatches 160; Indels 18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Hono sapiens"
mol_type="mRNA"
db_xref="taxon:9606"
/clone="DKFZp686010116"
/dev_stage="adult"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone_lib="686 (synonym:
/note="Vector: pTriplEx2;
cDNA-collection"
                                                                                                                                                                                                                                                                                                                                                             EST (Duesterhoeft, et al.)
Unpublished (1999)
                                                                                                                                                           AL700018
AL700018.1 GI:19620551
                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . .664
                                                                                                                                                                                                                                                                                                                                                                                                  Contact: MIPS
                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                            Wiemann, S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  295
                                                                                                               DEFINITION
                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                    RESULT 14
AL700018
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
```

à d à 셤 ò g ò g à g ò

```
1177
                                                                                                                                                                                                                                                                            1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BX473839 572 bp mRNA linear BST 04-SEP-2003
DKEZp686H08165_r1 686 (synonym: hlcc3) Homo sapiens cDNA clone
DKFZp686H08165_5', mRNA sequence.
1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                   1238 AATAAAAAAGAAAGAGGACCAAAGTIGGTIAAATIATIGACAGGAAATCAAGATITG 1297
                                                                   414
                                                                                                                                                                                                                                                                                                                                                   534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata; Craniata, Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo. 1 (Joass 1 to 572)
Bahr, A., Lauber, J., Mewes, H.W., Weil, B., Amid, C., Osanger, A., Fobo, G., Han, M. and Miemann, S.
EST (Bahr, A., Lauber, J., Mewes, H.W., Weil, B., et al.)
Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ingolstaedter Landstr.1, D-85764 Neuherberg, Germany
This is the 5' sequence of the clone insert
Clone from S. Wiemann, Molecular Genome Analysis, German Cancer
Research Center (DKZP); Email s.wiemann@dkfz-heidelberg.de;
sequenced by Qiagen (Hilden/Germany) within the cDNA sequencing
consortium of the German Genome Project.
This clone (DKZp666H08165) is available at the RZPD in Berlin.
Please contact the RZDs. Ressourcenzentrum, Heubnerweg 6, 14059
Berlin-Charlottenburg, GERWANY; Email: clone@rzpd.de.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hlcc3)"
Site_1: SfiIA; Site_2: SfiIB;
                                                                                                                                       130 TCTAAGGACATTACGAAAATA------AAGTTGATTTCAGAGCATTTAAAGCA
                                                                                                                                                                                                        415 TCTAGGGATATCCTGGCCAATTCCAAGCAACGGGATGTAGATTTCAAGGCATTTTTACAA
                                                                                                                                                                                                                                                                               1178 GATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAGAAAATTCAGAGCAAAAACA
                                                                                                                                                                                                                                                                                                                                    475 AATTTAAAGTCACTGGTAGCATCTAGAAAAGAGGCTGAAGAAGAGAGTATGGAATGAAGGAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       535 ATGAAGAAGGAGAGGAGGACTAAAGCTGGTTAAACTTCTCATAGGAAACCGAGACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               595 CIGGATAATICATACTATGACTGGTACATICTIGTAACAAATAAATGCCATCCANAACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68 AGACTACTGGGTATCAGAATGGCAAACTTAACCTTCCAGAAAATACAGATGATTGG
                                                                355 AAAGATAAAATATGGAAACAAAACCAAAATCTTTCACTGTTTGTAAGAGAAGGGGCTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 22.7%; Score 351.8; DB 13; Length 572; Best Local Similarity 98.1%; Pred. No. 4.1e-53; Matches 356; Conservative 0; Mismatches 7; Indels 0;
```

```
Mon Apr 26 09:48:40 2004
```

210 AGTCAGITTGGIATCAGAATGGCAAAGCAACTIAACCITCCAGAAAAIACAGAIGATGG 269	128 ACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAAGATTGACCAAAAACACAGGGAA 187	270 ACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAGAACAAGAAGGAA 329	188 ATTITGACTGAACAGGTGAATGGAGCAGTCTTGAAGTGGTTAAAAAAAA	330 ATTITGACIGAACAGGAGGATGGAGGAGCTTTAAAAAAAAAA	248 GTTGATATGGGCATCACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTG 307	390 GIIGATAIGGGCAICACACAIGGACCAGCIATICAAATAGAAGAACTAITCAAAGAAIIG 449	308 CGGABAACAGCCATTGAAGATTCGATTCAGACATCTBAGATGGGAAAGGCCCAGTAAAAT 367	450 CGGAAAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGGAAGGCCCAGTAAAAT 509	368 GCTCCTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCAAAAAAAA	510 GCTCCTAAAGACCAAACTGTGTGTGTGTAGAGAACTTCAAAGAAAAAA 569	428 AAG 430	570 AAG 572	
2	н	N	н	m	8	М	m	4	M	S	4	Ŋ	
q	ò	QQ	ઠે	qq	ò	QQ	ò	Q C .	δλ	QQ	ò	QC	

Search completed: April 26, 2004, 01:59:33 Job time : 2817.53 secs

Sequence 1, Appli Sequence 1, Appli Sequence 1, Appli Sequence 6, Appli Sequence 2, Appli Sequence 22, Appli Sequence 22, Appli Sequence 22, Appli Sequence 22, Appli Sequence 22, Appli Sequence 33, Appli Sequence 34, Appli Sequence 36, Appli Sequence 36, Appli Sequence 36, Appli Sequence 36, Appli Sequence 36, Appli Sequence 36, Appli Sequence 36, Appli Sequence 36, Appli Sequence 36, Appli Sequence 36, Appli

```
ATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAAAGAGGATGTAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                86 ATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAAGAGGGATGTAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query March 94.4%; Score 1462.4; DB 4; Length 4771; Best Local Similarity 99.9%; Pred. No. 0; Matches 1463; Conservative 0; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-620-312D-121

105-09-620-312D-121

106-09-620-312D-121

107-09-620-312D-121

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-312D

107-09-620-920-920

107-09-620-920

107-09-620-920

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-09-620

107-
US-07-710-361-2
US-08-929-329-1
US-08-929-329-1
US-09-790-988-1
US-10-204-708-5
US-10-204-708-6
US-10-204-708-6
US-09-138-024-22
US-09-138-024-22
US-09-138-024-22
US-09-138-024-22
US-09-138-024-22
US-09-138-024-22
US-09-138-024-22
US-10-204-708-12
US-10-204-708-12
US-10-204-708-12
US-10-204-708-12
US-10-204-708-12
US-10-204-708-12
US-10-204-708-12
US-10-204-708-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ALIGNMENTS
                                                                                                        1696
11015
18852
4949
4949
4949
10619
8607
9347
2181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     , NAME/KEY: CDS
, LOCATION: (3023)..(4771)
US-09-620-312D-121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
          0444444
0.004444
0.0004
0.0004
0.0004
                                                                                                                                                                                                                                                                                                υ υυυ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 121, App Sequence 13, Appl Sequence 13, Appl Sequence 1, Appl Sequence 2813, Appl Sequence 2813, Appl Sequence 5, Appl Sequence 1, Appl Sequence 1, Appl Sequence 1, Appl Sequence 15, Appl Sequence 15, Appl Sequence 17, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 27, Appl Sequence 28, Appl Sequence 5, Appl Sequence 5, Appl Sequence 5, Appl Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli
                                                                                                                                                                                  April 25, 2004, 07:15:18; Search time 76.8439 Seconds (without alignments) 11186.557 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                       US-10-051-835-17
1549
1 aacacatcagatattttcag......ctctaaatctttaccatcaa 1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Issued Patents NA:*
1: /cgn2_6/ptodata/2/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
                                   GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 4771 4 US-09-620-312D-121
4 7218 1 US-08-232-465-14
1 9124 2 US-08-218-131
6.326 4 US-10-204-708-58
0 1664976 4 US-08-916-421B-1
0 5562 4 US-10-204-708-63
1.04 19124 2 US-08-916-421B-1
1.0 396 4 US-09-13-56-53
1.248 2 US-09-13-56-53
1.248 3 US-09-252-329-5
1.248 3 US-09-252-329-5
1.248 3 US-09-252-329-5
1.248 2 US-09-13-56-53
1.248 2 US-09-252-329-5
1.248 2 US-09-252-329-5
1.248 2 US-09-252-329-5
1.248 3 US-09-252-329-5
1.248 3 US-09-251-389-3
1.247 2 US-09-014-969-14
1.247 2 US-09-014-969-14
1.223 1 US-09-543-641-3758
1.223 1 US-09-751-389-3
1.223 1 US-09-751-389-3
1.223 1 US-08-543-5280-1
1.223 1 US-08-543-5280-1
1.223 1 US-08-98-416-595
1.223 1 US-08-98-417-6
1.223 1 US-08-628-417-6
1.223 1 US-08-628-417-6
1.223 1 US-08-628-417-6
1.223 1 US-08-628-417-6
1.223 1 US-08-628-417-6
1.223 1 US-08-628-417-6
1.223 1 US-08-628-417-6
1.223 1 US-08-628-417-6
1.223 1 US-08-628-417-6
1.223 1 US-08-628-417-6
1.223 1 US-08-628-417-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    682709 segs, 277475446 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                      - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                             IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                         OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Searched:
                                                                                                                                                                                             Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Result
```

ö

```
TCTACTCTAAAICTTTACCAICAA 1549
                                                                                                                                                                                                                                          TELEX: 899149
INFORMATION FOR SEQ ID NO: 14
SEQUENCE CHARACTERISTICS:
LENGTH: 7218 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; IMMEDIATE SOURCE:
; CLONE: pTZgpt-F1s
US-08-232-463-14
                                                                                                                                                                                                                           1526
                                                                                                                                                                                                                                                   1441
          1141
                                 1286
                                                       1201
                                                                               1346
                                                                                                      1261
                                                                                                                            1406
                                                                                                                                                                            1466
                                                  g
                                                                       ठ हे ठ
                                                                                                                                               g &
                                                                                                                                                                                            g
                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                               셤
          원
장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021 CTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTGATTTCAGA 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1046 TTCCAGATTAAAATTGCAAAATTACAACAAAAATATGGGAACAAAGTAAAATTCTCA 1105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTATITIGIGGGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTGATTTCAGA 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCCAGAAAAGCAGCAGCAGAAAAATTC 1225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1226 AGAGCAAAAACAAATAAAAAAAAAAAGAGGACCAAAGTTGGTTAAATTATTGACAGGA 1285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                986 GACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAATATGATTAC 1045
                                                                                                                                                                                                                                                                                                                                                                                                                                     745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901 GACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAATATGATTAT 960
                                                                                                                   240
                                                                                                                                           385
                                                                                                                                                                                         445
                                                                                                                                                                                                                360
                                                                                                                                                                                                                                        502
                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                       565
                                                                                                                                                                                                                                                                                                       625
                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                      CTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCAAAGCCTTC 685
                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661 ccarrirgcrircaccrigiargaarricaccraccaargecacrarricarrirgagicaaa 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGGAAGCCCTC 865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCCAACAAGCA 925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781 ATTAACCATTICAATCTGATGATAACAAGTATTTTGAAGACCATCAAGTCCAACAAGA 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGAAGTGCATTCGAGGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTATCT 985
                                             265
                                                                   121 GTGAATGGAGCAGTCTTGAAGTGGTTAAAAAAGAACATCTTGTTGATATGGGCATCACA 180
                                                                                           266 CATGGACCAGCTATTCAAATAGAACTATTCAAAGAATTGCGGAAAACAGCCATTGAA 325
                                                                                                                                                                  241 GATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAATGCTCCTAAAGACCAAACT 300
                      120
                                                                                                          181 CATGGACCAGCTATTCAAATAGAACAATTCAAAGAATTGCGGAAAACAGCCATTGAA
                                                                                                                                                                                                         GATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCACTAAAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                      686 ACAAATACAGCAACAGCACAGAAGATGTCAAGATGAAATTTAGCAATGAGGTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                      146 CAGTGGTTAGAAAGTCATAAGATTGACCAAAAAACACAGGGAAATTTTGACTGAACAAGAC
              326 GATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAAATGCTCCTAAAGACCAAACT
                                                                                                                                                                                                                                        GATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAAGGTTCTAAAGGTT
                                                                                                                                                                                                                                                                                        481 IGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGGATTTTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGATTIGCTITCAGCTIGIAIGAATTCACGTACCAAIGGCACTAITCATTIGGAGICAAA
                                                                                                                                                                                         GTGTCTCAAAAGGAACGTAGAAAACTTCAAAAGCAAAAACAAAAGGGGTAAAAGAGAACCCA
                                                                                                                                                                                                                                                                                                                                         TGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGGATTTTAGT
                                              GTGAATGGAGCAGTCTTGAAGTGGTTAAAAAAAAAAAACATCTTGTTGATATGGGCATCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1166
                                                                                                                                                                                                                                           446
                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                       979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1106
                                                                                                                                                                                           386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    926
                                                                                                                                                                                                                                                                                                                                         999
                                              206
                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 8
                                                                                                           ,
D
                                                                                                                                                                                        8 8
                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      දු දු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                            ò
                                                                                                                                    \delta
                                                                                                                                                              d
                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                            8 b
                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                      δ
ઠે
                  g
                                              à
                                                              B
                                                                                                                                                                                                                                                                                                                                         ò
```

1320 1465 1321 dacirrdarccreactriaacarcaardeacrearaccraaaccrracaagaaagcceagra 1380 GCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAAACCACACCAAATGAGACGATT 1525 CACCCAGATCAAACACACTTAGATTTCCTGAAGGAAATTAAAATGGTTTGCTGTATTG **AATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACAATAAATGC** GAGTITGATCCTGAGTCTAACATCAATGGAGTGGTCAAAGCTTACAAGAAAGCCGAGTA CONDIECT STATE OF STA MESUL:

US-08-23-463-14/C

Sequence 14, Application US/08232463

Patent No. 5670367

Patent No. 5670367

APPLICANT: DORNER, F. APPLICANT: SCHEIFLINGER, F. APPLICANT: SCHEIFLINGER, F. APPLICANT: SCHEIFLINGER, F. APPLICANT: SCHEIFLINGER, F. APPLICANT: SCHEIFLINGER, F. APPLICANT: SCHEIFLINGER, F. APPLICANT: SCHEIFLINGER, F. APPLICANT: SCHEIFLINGER, F. G. TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS: CORRESPONDENCE ADDRESS: CORRESPONDENCE ADDRESS: ADDRESSE: STREET: 1800 Diagonal Road, Suite 500 CITY: Alexandria STATE: VA

ö

```
RESULT 4

US-10-204-708-58/c

| Sequence 58, Application US/10204708
| Sequence 58, Application US/10204708
| Sequence 58, Application US/10204708
| Sequence 58, Application US/10204708
| Patent No. 6677731
| GENERAL INFORMATION:
| APPLICANT: PIEPENBROCK, Christian
| APPLICANT: PIEPENBROCK, Christian
| TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA Replication
| TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA Replication
| TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA Replication
| TITLE OF INVENTION: Dy Assessing DNA Methylation
| TITLE OF INVENTION: Dy Assessing DNA Methylation
| FILE OF INVENTION: DY ASSOCIATION NUMBER: US/10/204,708
| PRIOR PELING DATE: 2001-04-07
| PRIOR FILING DATE: 2000-04-07
| PRIOR PELING DATE: 2000-04-07
| PRIOR PELING DATE: 2000-06-30
| PRIOR PELING DATE: 2000-06-30
| PRIOR PELING DATE: 2000-06-30
| PRIOR FILING DATE: 2000-06-30
| PRIOR FILING DATE: 2000-09-01
| NUMBER OF SEQ ID NOS: 98
| LEWATH. 6326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1242 AAAAAGAAAGAGGGACCAAAGTTGGTTAAATTATTGACAGGAAATCAAGATTTGTTAG 1301
                                                                                                                                                                                                                                           1062 AAAATTACAACAACAAATATGGGAACAAAGTAAAAATTCTCACTATTTGTGCGAGATG 1121
                                                                                                                                                                                                                                                                                                                            1122 GGACCAGCTCTAAGGACATTACGAAAATAAAGTTGATTTCAGAGCATTTAAAGCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                               1182 TTAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAGAAAAATTCAGAGCAAAAACAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 52.4; DB 2; Length 19124; Pred. No. 0.0036; 0; Mismatches 156; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 6326;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
3.1%; Score 47.4; DB 4; Length 6
Best Local Similarity 44.9%; Pred. No. 0.04;
Matches 260; Conservative 0; Mismatches 316; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: chemically treated genomic DNA US-10-204-708-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                               Query Match
Best Local Similarity 48.3%;
Matches 146; Conservative
TYPE: nucleic acid
STRANDEDNESS: single
                                      TOPOLOGY: linear
MOLECULE TYPE: CDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15897 AA 15898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1362 AA 1363
                                                                                                                ; ANTI-SENSE:
US-08-487-826B-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                        ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Sim, Kim L.
APPLICANT: Sim, Kim L.
APPLICANT: Sim, Kim L.
APPLICANT: Chitnis, Chetan
APPLICANT: Chitnis, Chetan
APPLICANT: Peterson, David S.
APPLICANT: Peterson, David S.
APPLICANT: Wellems Thomas E.
APPLICANT: Wellems Thomas E.
APPLICANT: AND PLASMODIUM VIVAX
TITLE OF INVENTION: AND PLASMODIUM FALCIPARUM EXTHROCYTE BINDING PROTEINS
NUMBER OF SEQUENCES:
ADDRESSEE: Knobbe Martens Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
CITY: Newport Beach
STATE: California
                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                          AGAAGAACTATTCAAAGAATTGCGGAAAACAGCCATTGAAGATTCGATTCAGACATCTAA 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             346 GATGGGAAAGCCCAGTAAAATGCTCCTAAAGACCAAACTGTGTCTCAAAAGGAACGTAG 405
                                                                                     46 ATATATGTAAAAGAAATTTGCAAGACTACTGGGTATCAGAATGGCAAAGCAACTTAACCT 105
                                                                                                                                                                      TCCAGAAAATACAGATGATTGGACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAA 165
                                                                                                                                                                                                                                                    GATTGACCAAAAACACAGGGAAATTTTGACTGAACAAGACGTGAATGGAGCAGTCTTGAA 225
                                                                                                                                                                                                                                                                                                                                       226 GTGGTTAAAAAAAAAACATCTTGTTGATATGGGCATCACACATGGACCAGCTATTCAAAT 285
                                               Gaps
                                            ö
    Query Match

4.4%; Score 68.6; DB 1; Length 7218;
Best Local Similarity 3.6%; Pred. No. 2.7e-07;
Matches 14; Conservative 234; Mismatches 143; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC comparible
COMPUTER: IBM PC comparible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/487,826B
FILLING DATE: 10-58P-1993
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         406 AGAAACTTCAAAGCAAAAACAAAAGGGTAAA 436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: 1staeleen, Ned
REGISTRATION NUMBER: 29,655
REFERENCE/DOCKET NUMBER: NIH121.001CP1
TELECOMMUNICATION INFORMATION:
TELEFHONE: (619) 235-0176
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 13, Application US/08487826B Patent No. 5993827
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-487-826B-13
                                                                                                                                                                                                                                                                                                                                                                                                                                 286
                                                                                                                                                                                                                                                             166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Я
                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                         임
                                                                                                                                                                 ઠે
                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                  \dot{\delta}
```

'n

Gape

us-10-051-835-17.rni

OTHER INFORMATION: n equals a, t, c, or g NAME/KEY: misc_feature ; LOCATION: (84812) ; CATTON: (84812) ; OTHER INFORMATION: n equals a, t, c, or g NAME/KEY: misc_feature ; LOCATION: (98120) ; NAME/KEY: misc_feature ; NAME/KEY: misc_feature ; LOCATION: (98120) ; LOCATION: (98159) ; COCATION: (98159) ; COCATION: (98159) ; COCATION: (98159)	EXTRINGATION: II equals a, c, c, c, c, c, c, c, c, c, c, c, c, c,	CEY: misc_feature INFORMATION: (103998) . (103998) INFORMATION: n equals a, t, c, or EEY: misc_feature INFORMATION: n equals a, t, c, or EEY: misc_feature EEX: misc_feature EEX: misc_feature EEX: misc_feature EEX: misc_feature EEX: misc_feature EEX: misc_feature	t, c, or t, c, or	LOCATION: (231980) (231980) OTHER INFORMATION: n equals a, t, c, or g NAME/KEY misc. feature LOCATION: (234187) (234167) OTHER INFORMATION: n equals a, t, c, or g	18 a, t, c, or 18 a, t, c, or 18 a, t, c, or 18 a, t, c, or 18 a, t, c, or 18 a, t, c, or 26) 18 a, t, c, or 18 a, t, c, or 18 a, t, c, or 18 a, t, c, or 18 a, t, c, or 18 a, t, c, or 18 a, t, c, or 18 a, t, c, or 18 a, t, c, or 18 a, t, c, or 18 a, t, c, or 18 a, t, c, or	; OTHER INFORMATION: n equals a, t, c, or g
OY 803 AAAGACACCCATGGGAAAATTGTTGCCATCAAAGTCACCAATGATACCAA-GGAAGC 861 Db 2436 AAACAAAAATCTAATTTTTTTTCACAACAAATTTCCCAATTATCTCAATTACCAATTATCTCAATTACGAAT 2377 OY 862 CCTCATTAACCATTCAATCTGATGATAACAAGTATTTGAAGACCATCAAGTCCAACA 921 Db 2376 CTTTTTTTTTTTTTAATACGATACTATATTATAAACATCAATACTAATAATAATA 2317 OY 922 AGCAAAGAAGTGCATTCGAGAATTGTGGGAAAGTTTATAAATA 2317	Db 2316 ACTAAAAAACAAAAAATAACTATATATTTTTTTTAACTAACTAACTAAATA 2257 Qy 982 ATCTGACAGATTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAATATGA 1041 Db 2256 TCATATATCAACACAAAAAATACAAAAAAAAAAAAAAA	1102 CTCACTATTGTGCGAGATGGGACCAGCTCTAAGACATTACGAAAAATAAAGTTGATTT	OY 1222 AITCAGAGCAAAAAAAAAAAAAGAGAGGACCAAAGITGGITAAAITAITGAC 1281	1342 ATGCCACTCAAATCAAAAACACTTAGATTTCCTGAA 1380 	SULT 5 -08-916-421B-1/c Sequence 1, Application US/08916421B Partent No. 6503729 TITLE OF INVENTION: Complete Genome Sequence of the Patent No. 6503729 TITLE OF INVENTION: Complete Genome Sequence of the FILE PREFERCE: PB275 CURRENT FILING DATE: 1997-08-22 CURRENT FILING DATE: 1996-08-22 NUMBER OF SEQ ID NOS: 3 SEQ ID NO 1 LENGTH: 1964976 TYPE: DNA MACHANOCOCUS jannaschii FEATURE: PATENT PATENT NAMER: US 60/024,428 RIORANISM: Patentin version 3.1 SEQ ID NO 1 SEQ ID NO 1 COFTANISM: Machanococcus jannaschii FEATURE: LOCATION: (28222) OTHER INFORMATION: n equals a, t, c, or g NAME/REX: misc_feature LOCATION: (28257)(28258) OTHER INFORMATION: n equals a, t, c, or g NAME/REX: misc_feature LOCATION: (84773)(84773). LOCATION: (84773)(84773). NAME/REX: misc_feature LOCATION: n equals a, t, c, or g NAME/REX: misc_feature LOCATION: n equals a, t, c, or g NAME/REX: misc_feature LOCATION: n equals a, t, c, or g NAME/REX: misc_feature LOCATION: n equals a, t, c, or g	

sequence 63, Application US/10204708

Patent No. 6677731

GENERAL INFORMATION:
APPLICANT: OLEK, Alexander
APPLICANT: PIEPENROCK, Christian
APPLICANT: BIEPENROCK, Christian
APPLICANT: BIEPENROCK, Christian
APPLICANT: BIEPENROCK, Christian
APPLICANT: BIEPENROCK, Christian
APPLICANT: BIEPENROCK, Christian
APPLICANT: BIEPENROCK, Christian
TITLE OF INVENTION: Dy Assessing DNA Methylation
FILE REFERENCE: 5013.1012
CURRENT APPLICATION NUMBER: US/10/204,708
CURRENT FILING DATE: 2001-04-06
PRIOR APPLICATION NUMBER: DE 10019173 8
PRIOR FILING DATE: 2000-04-06
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR PILING DATE: 2000-09-01
NUMBER OF SEQ ID NOS: 98
SEQ ID NO 63
LENGRIFF: 5562 844227 АААТТАААААСАСТААТТСАААААТТАБААТТТАААААТАТААААТТТААСАА 344169 irrigiradardaadantriradacarcrirrracaaaaadarrigdardaaaraa 844110 844109 AIGAATATAAGGATTTTGACTTTATATTTTACTACACTGGAGAAGAAAAAGAAAAA 844050 1110 TIGIGCGAGAIGGGACCAGCICTAAGGACATTACGAAAAATAAAGTIGATTTCAGAGCAT 1169 1050 AGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAAAATTTCTCACTAT 1109 1170 TTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAAGCAGAAGAAAAATTCAGAG 1229 1230 CARABACABATAAAAAAAAAGAAGGACCAAAGTTGGTTAAATTATTGACAGGAAATC 1289 1205 AAAGCAGCAGAAGAAAATTCAGAGCAAAAACAAATAAAAAGAAAAGAGAGGGACCAAAG 1264 1145 AAAAATAAAGTTGATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGA Gaps Gaps 7 ö ; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens) US-10-204-708-63 DB 4; Length 1664976; Query Match
3.0%; Score 46.2; DB 4; Length 5562;
Best Local Similarity 49.2%; Pred. No. 0.075;
Matches 121; Conservative 0; Mismatches 125; Indels 0 843929 AAGAGAAATTAAAACAACTAATTTCCAAAGAAGAAAAAA 843889 Query Match
3.0%; Score 47; DB 4; Length 166
Best Local Similarity 48.1%; Pred. No. 0.38;
Matches 164; Conservative 0; Mismatches 175; Indels 1350 CAGATCAAACAACACTTAGATTTCCTGAAGGAAATTAAA 1390 TYPE: DNA ORGANISM: Artificial Sequence FEATURE: RESULT 6 US-10-204-708-63/c g ò g ઠ g ठ ద δ 셤 δ a ò 셤 à ద

ø

Ď

ठ

셤 à

```
CURRENT FILING DATE: 2000-08-15
NUMBER OF SEQ ID NOS: 196
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 53
LENGTH: 396
                                                                                                                                                       NAME/KEY: misc_feature

// LOCATION: (1)...(396)

// OTHER INFORMATION: n = A,T,C or G

US-09-640-173-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             or G
                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 38.3%;
Matches 142; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: (1)...(396)
; OTHER INFORMATION: n = A,T,C
US-09-713-550-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1283 GGAAATCAAGA 1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAAAAAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc_feature
                                                                                              TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1043
                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                      1325 ATTCTTGTAACAAATAAATGCCACCCAGATCAAACAAAAACACTTAGATTTCCTGAAGGAA 1384
                                                                                                                             1265 ITGGTTAAATTATTGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTAC 1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               990 GAITIGITATIGAAGIGGACATTATICCACAGITCTCTGAATGCCAATAIGATTACTTCC 1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      870 ACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCCCAACAAGCAAAGA 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             930 AGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTATCTGACA 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            810 AACCCCATGGGAAAATŢGTTGGCATCAAAGTCACCAATGATACCAAGGAAGCCCTCATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1050 AGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5; DB 4; Length 832;
0.053;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 2.9%; Score 45.6; DB 4; Length 8:
Best Local Similarity 15.3%; Pred. No. 0.053;
Matches 44; Conservative 132; Mismatches 111; Indels
                                                                                                                                                                                                                                                                                           Sequence 2813, Application US/09621976
Fatent No. 663963
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Johns Milne Edwards, J.B.
APPLICANT: Glordano, J.Y.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENSET-054PR2.
CURRENT APPLICATION UNMER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 2813
LENGTH: 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 53, Application US/09640173
Perent No. 6613515
GENERAL INFORMATION:
APPLICANT: XU, Jiangchun
APPLICANT: Stolk, John A.
TITLE OF INVENTION: WETHODS OF USE THEREFOR
FILE REFERENCE: 210.121.48402
CURRENT APPLICATION NUMBER: US/09/640,173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Homo sapiens
                                                                                                                                                                         1385 ATTAAA 1390
                                                                                                                                                                                                               1385 ATAAAA 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ) NAME/KEY: CDS
; LOCATION: 235.399
US-09-621-976-2813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -09-640-173-53/c
                                                                                                                                                                                                                                                                                         -09-621-976-2813
```

g

à

ઠે g ò

ò g

```
TACTFCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAAGTAAAAATTC 1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1163 AGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAGAAAAA 1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1223 TTCAGAGCAAAACAAATAAAAAGAAAGAAGAGGGCCCAAAGTTGGTTAAATTATTGACA 1282
                                                                                                                                                                                                                                                                                                312 ANTAINAAGNANNATHNNNNNNNNNNNNNNNNTHNNTAINTTICTINTICTITTINIGAA 253
                                                                                                                                                                                                                                                                                                                                                                                                                     923 GCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTA 982
                                                                                                                                                                              372 GCAAGNINNININAANINNIAGANINNINNINNINNINNINNINNINCTCGCINNICCCINITINNINAANIN 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       983 TCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAATATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 9
US-09-713-550-53/c
| Sequence 53, Application US/09713550
| Patent No. 6617109
| General Information:
| APPLICANT: Xu, Jiangchun
| APPLICANT: Xu, Jiangchun
| TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
| TITLE OF INVENTION: COMPOSITIONS AND DIAGNOSIS OF OVARIAN CANCER
| TITLE OF INVENTION: COMPOSITIONS AND CANCER
| TITLE OF INVENTION: COMPOSITIONS AND CANCER
| TITLE OF INVENTION: COMPOSITIONS OF OVARIAN CANCER
| CURRENT FILING DATE: 2000-11-14
| NUMBER OF SEQ ID NOS: 205
| SOFTWARE: FastSEQ for Windows Version 3.0
| SEQ ID NO 53
| LENGTH: 396
Score 45.4; DB 4; Length 396;
Pred. No. 0.046;
0; Mismatches 229; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 396;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 45.4; DB 4;
Pred. No. 0.046;
0; Mismatches 229;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 38.3%;
Matches 142; Conservative
```

```
1062 ricasosaritututosacraratacartutosagocrorakosacaritutosaritutoracia 1121
                                                                                                  1062 idaaqaartriridagraakcariridaaggcreragacarrirideaririridaacord 1121
                                                                                                                                    1119 ATGGGACCAGCTCTAAGGACATTACGAAAATAAAGTTGATTTCAGAGCATTTAAAGCAG 1178
                                                                                                                                                                                                      1179 ATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAAAAATTCAGAGCAAAAAA 1238
                                                                                                                                                                                                                                     1059 TGCAAAATTACAACAAAAAAATATGGGAACAAAGTAAAAAATTCTCACTATTTGTGCGAG
                                                                                                                                                          1122 CAAGIGCCATCTTTAAGGGGGAAAMTACATGAAGTCACCGTTACAGTAACTTGAIGTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1059 TGCAAAATTACAACAAAAATATGGGAACAAAGTAAAAAATTCTCACTATTTGTGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                  ö
                                                                                                                                                                                                                                                                                                                                                                            NS-09-253-329-5

Sequence 5, Application US/09252329

Sequence 5, Application US/09252329

Patent No. 6147192

TELE OF INVENTION: Weight Control Pathway Genes and Uses

TITLE OF INVENTION: Therefor

NUMBER OF SEQUENCES: 36

CORRESPONDENCE ADDRESS:

ADDRESSED: LAHIVE & COCKFIELD, LLP

STREET: 28 State Street

CITY: Boston

STATE: Massachusetts

COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1248;
Query Match
2.9%; Score 45.4; DB 2; Length 1248;
Best Local Similarity 51.9%; Pred. No. 0.069;
Matches 97; Conservative 2; Mismatches 88; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.069;
---- 88; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compartible
OPERATURG SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
APPLICATION NUMBER: US/09/252,329
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 45.4; DB 3;
Pred. No. 0.069;
2; Mismatches 88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/897,340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AFFLLING DATE:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Silveri, Jean M.
REGISTRATION NUMBER: 39,030
REFERENCE/DOCKET NUMBER: MAI-(
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION: (617)227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        51.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (617)227-5941
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleic acid
EDNESS: single
                                                                                                                                                                                                                                                                           1239 ATAAAAA 1245
                                                                                                                                                                                                                                                                                                              1242 AAAAAAA 1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: lir
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 02109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-252-329-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8
                                                                          ઠે
                                                                                                       유
                                                                                                                                                                         В
                                                                                                                                                                                                                                          셤
                                                                                                                                          ò
                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                               ઠે
                                                                          983 TCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAATATGAT 1042
                                                                                                                                                                                                               1163 AGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAAAAA 1222
                                                                                                                                                                                                                                                                                                                                               1223 TTCAGAGCAAAAACAAATAAAAAGAAAGAAAGGAGGGACCAAAGTTGGTTAAATTATTGACA 1282
                                                                                                                                              1043 TACTICCAGATTAAAATGCAAAATTACAACAAAAATATGGGAACAAAGTAAAAATTC 1102
                                                                                                         GCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTA 982
                                        SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/897,340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLING DATE:
FILING DATE:
CLASSIFICATION: 435
PRICR APPLICATION DATA:
APPLICATION NUMBER: US 08/715,032
FILING DATE: 17-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Silveri, Jean M.
REGISTRATION NUMBER: 39,030
REFERENCE/DOCKET NUMBER: MNI-005CP
TELECOMUNICATION INFORMATION:
TELECOMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC comparatible
OCNEVIER: SYSTEM: PC-DOS/MS-DOS
SOPTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: 5: SEQUENCE CHARACTERISTICS: THOUSE, SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 1248 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                      1283 GGAAATCAAGA 1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Massachusetts
USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        12 AAAAAAAAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TOPOLOGY: lii
; MOLECULE TYPE:
US-08-897-340-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 10
US-08-897-340-5
          923
                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                 ò
                                    셤
                                                                       ò
                                                                                                    qq
                                                                                                                                              à
                                                                                                                                                                       임
                                                                                                                                                                                                        ò
```

```
1329 TTGTAACAA 1337
                                                                                                                                                                                                                          1466 TATAAAAA 1474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; NAME/KEY: CDS
; LOCATION: 235..399
US-09-621-976-2813
                                                                                                                                                                                                                                                                             RESULT 13
US-09-621-976-2813/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S:
Matches 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                    QQ
                                                                                                                           à
                                                                                                                                                    g
                                                                                                                                                                                   δ
8 6
                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1029 AATGCCAATATGATTACTTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAAC 1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1089 AAAGTAAAAATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAA 1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1119 ATGGGACCAGCTCTAAGGACATTACGAAAATAAAGTTGATTTCAGAGCATTTAAAGCAG 1178
                                                               1179 ATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAGAAAAATTCAGAGCAAAAACAA 1238
                                                                                               1122 CAAGIGCCAICITIAAGGGGGAAAMIACAIGAAGICACCGIIACAGIAACIIGAIGIGIA 1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc_feature
LOCATION: 3770_.4013
OTHER INFORMATION: /note= "RP4 origin of DNA transfer (orit) from
OTHER INFORMATION: plasmid RP4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 45; DB 2; Length 6243;
Pred. No. 0.15;
0; Mismatches 165; Indels
                                                                                                                                                                                                                                        Sequence 1. Application US/09056075
Patent No. 5955368
GENERAL INFORMATION:
APPLICANT: Johnson, Eric A.
APPLICANT: Road, Julian
APPLICANT: Road, Julian
TITLE OF INVENTION: Expression System for Clostridium
TITLE OF INVENTION: Species
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Quarles & Brady
STREET: 1 South Pinckney Street
CITY: Madison
STATE: WI
COUNTRY: US
COUNTRY: US
TIP: 53701-2113
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER PRADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER PREADABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION WIMBER: US/09/056,075
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
TELEPHONE: 608-251-5000
TELEFAX: 608-251-9166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Seay, Nicholas J.
REGISTRATION NUMBER: 27386
REFERENCE/DOCKET NUMBER: 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 6243 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2.9%;
Similarity 46.6%;
14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
                                                                                                                                1239 ATAAAAA 1245
                                                                                                                                                              1242 AAAAAA 1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Simi
Matches 144;
                                                                                                                                                                                                              RESULT 12
US-09-056-075-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-056-075-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                        q
 ð
                          g
                                                             ਨੇ
                                                                                                                              δ
```

```
1033 CCAMINIGAITACTICCAGAITAAAAIGCAAAAATTACAACAACAAAATATGGGAACAAAG 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1093 TAAAAATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAA 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1153 AGTTGATTTCAGAGCATTTTAAAGCAGATTTTAAAACACTGGCAGAGGCAGAAAAGCAGC 1212
                                              1269 TTAAATTATTGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTC 1328
                                                                                                                                                                                                                                         1149 ATAAAGTTGATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAG 1208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          334 RWYYWWKSTYACASRYRKYIWGWWWYMWKRMSTRWYCYMCWKCCMYRGRRCAWYIMARG 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 274 RMWSYAWGKWKSMRSAMSMCTRMYYKKGSTYWTMKCTCATWCYWYWKKWKRWMSKTCWSG 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  853 CAAGGAAGCCCTCATTAACCATTTCAATCTGATAAACAAGTATTTTGAAGACCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           214 SRGGYMISYISTRSYSM----YMASMWYIWCWWWGRWWSTYWYMAWGKWWRYAITWRRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               913 AGTCCAACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 973 TAGTACTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATG
                                                                                                    2.9%; Score 44.8; DB 4; Length 832; larity 12.9%; Pred. No. 0.084; Conservative 177; Mismatches 164; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2813, Application US/09621976

Batent No. 6639063

GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Glocrdano, J.Y.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENSET. 054 PR2
CURRENT APPLICATION NUMBER: US/09/621,976

CURRENT FILING DAIE: 2000-07-21

NUMBER OF SEQ ID NOS: 19335

SOFTWARE: Patent.pm

SEQ ID NO 2813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             213 AGAAGAAAATTCAGAGCAAAAACAAATAAAAAGA 1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        38 WRAMKREWNWRKWRSWRWWWWWW 3
```

```
7991 tritiraaaaatrcaaaratritraarcaaaaaararaaararaacraaraaraaraacra 7932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8168 AAAAATAAAAAAAAAATATAAATATATCCAAATATTTCGATAATCGCAATAAATT 8109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TIGATITICAGAGCATITIAAAGCAGAITITIAAAACACIGGCAGAGGICCAGAAAAGCAGCAG 1214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGAAAAATTCAGAGCAAAAACAAATAAAAAAAAAAGAGAGGGGCCAAAGTTGGTTAAAT 1274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1275 TATTGACAGGAAATCAAGATTTGTTAGATAATTC-ATACTATGAACAGTACATTCTTGTA 1333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1334 ACAAATAAATGCCACCCAGATCAAACAAAACACTTAGATTTCCTGAAGGAAATTAAATGG 1393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1035 AATATGATTACTTCCAGATTAAAATGCAAAATTACAACAAAAATATGGGAACAAAGTA 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1095 AAAAATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAG 1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8108 arabacrocabacababababababrirarcabaccaa---ararirraarrarropaar 8052
Sequence 2, Application US/10204708
Patent No. 667731
Patent No. 667731
Patent No. 667731
APPLICANT: DIERNATION:
APPLICANT: PIEPERBROCK, Christian
APPLICANT: BERLIN Kurt
TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA Replication
TITLE OF INVENTION: by Assessing DNA Methylation
FILE REPERENCE: 5013.1012
CURRENT APPLICATION NUMBER: US/10/204,708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens) US-10-204-708-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

2.9%; Score 44.4; DB 4; Length 10467;
Best Local Similarity 48.6%; Pred. No. 0.26;
Matches 180; Conservative 0; Mismatches 186; Indels 4;
                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/204,708
CURRENT FILING DATE: 2003-05-06
PRIOR APPLICATION NUMBER: PCT/FP01/03971
PRIOR PILING DATE: 2001-04-06
PRIOR FILING DATE: 2000-04-06
PRIOR FILING DATE: 2000-04-06
PRIOR FILING DATE: 2000-04-06
PRIOR FILING DATE: 2000-04-06
PRIOR FILING DATE: 2000-04-07
PRIOR PILING DATE: 2000-04-07
PRIOR APPLICATION NUMBER: DE 10019173-8
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-08-01
PRIOR PILING DATE: 2000-08-01
PRIOR PILING DATE: 2000-08-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1394 TTTGCTGTAT 1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAAAATATAT 7862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          , d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
```

Sequence 75, Application US/10204708; Patent No. 6677731; GENERAL INFORVATION: APPLICANT: OLEK, Alexander APPLICANT: PIEPENBROCK, Christian

RESULT 15 US-10-204-708-75/c

```
APPLICANT: BERLIN, Kurt
TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA Replication
TITLE OF INVENTION: Dy Assessing DNA Methylation
TITLE OF INVENTION: Dy Assessing DNA Methylation
CURRENT SPILICATION WUMBER: US/10/204,708
CURRENT PILING DATE: 2003-05-06
PRIOR PILING DATE: 2001-06-06
PRIOR PILING DATE: 2001-06-06
PRIOR APPLICATION NUMBER: DE 10019058.8
PRIOR PILING DATE: 2000-04-06
PRIOR PILING DATE: 2000-04-07
PRIOR PILING DATE: 2000-04-07
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR FILING DATE: 2000-06-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1069 CAACAACAAAATATGGGAACAAAGTAAAAATTCTCACTATTTGTGCGAGATGGGACCAG 1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1129 CICTAAGGACATTACGAAAATAAAGITGATTICAGAGCATTTAAAAGCAGATTTTAAAAC 1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    278 cercerracie cereceracera de la constala de la cercerta de la cercerración de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la cercera de la ce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1009 CATTATTCCACAGTTCTCTGAATGCCAATATGATTACTTCCAGATTAAAATGCAAAATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ) OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens) US-10-204-708-75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 4; Length 6656;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
2.9%; Score 44.2; DB 4; Length 60
Best Local Similarity 50.2%; Pred. No. 0.25;
Matches 135; Conservative 0; Mismatches 133; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1249 AAGAGGGGCCAAAGTTGGTTAAATTAT 1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         39 AAATTTTTAACCTAAATAACTAAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Search completed: April 26, 2004, 02:11:14
Job time : 81.8439 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           심
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
```

```
April 24, 2004, 23:47:42; Search time 411.576 Seconds (without alignments) 15988.422 Million cell updates/sec
                                                                                                                                                                                             US-10-051-835-17
1549
1 aacacatcagatattttcag.......ctctaaatctttaccatcaa 1549
                                                                                                                                                                                                                                                                                                                                                                             6747726
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                     3373863 seqs, 2124099041 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                          OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                       IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N_Geneseq_29Jan04:*

1: geneseqn1980s:*

3: geneseqn2000s:*

4: geneseqn2001as:*

5: geneseqn2001as:*

6: geneseqn2001s:*

7: geneseqn2003as:*

8: geneseqn2003as:*

9: geneseqn2003as:*
                                                                                                                                                                                                                                                                                                                                                                                                                 Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                       Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Database
                                                                                                                  Run on:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Description	Ade25681 Human cDN Aai24129 Probe #14	Human Probe	Human	Human	Human	Human	Adius/03 Frode #96 Abel7437 Human gen	Human	Novel		_	Human	Aal60054 Human Pc0	Interf	Probe	Aba67234 Human foe	Probe	Aba34329 Probe #12	Aak41409 Human bon
SUMMARIES	ADE25681 AAI24129	ABA69252 AAI49425	ABA51244	AAK43354	AAK17545	ABS42976	ABS17437	AAI58244	ADB48211	AAS01147	AAK77710	ABN60169	AAL60054	AAS01146	AA122155	ABA67234	AA147453	ABA34329	AAK41409
DB	0.4	4 4	4, 4	4	4	4º I	nφ	4	œ	4	4	Φ	7	4	4	4	4	4	4
Length	1549	4778	4778	4778	4778	4778	4778	4771	4771	6233	1045	705	6289	5870	4185	4185	4185	4185	4185
* Query Match	100.0	94.9	94.9	94.9	94.9	94.9	4. 4. 2. 0.	94.4	94.4	94.4	67.4	43.4	41.1	40.6	36.4	36.4	36.4	36.4	36.4
Score	1549	1470.4	1470.4	1470.4	1470.4	1470.4	1470.4	1462.4	1462.4	1462.4	1043.4	672	636.2	628.4	564.6	564.6	564.6	564.6	564.6
ult No.	140	w 4	ın v	,	00	ο (2 2	12	13	14	12	16	11	8	13	20	21	22	53
Result No.		υυ	υt	ט ט	υ	υ	ပပ								υ	υ	υ	υ	υ

																	•				
Human liv	Probe #78	Human gen	Human cDN	Human bon	Human car	Human imm	Human car	CDNA enco	Human cDN	Novel hum	Novel hum	Human	Human imm	Human		Human	Rice gene	Tumour su	Human imm	Base sedu	Base sequ
Abs41002	Aai07856	Abs15415			Aas35870	Aak69748			Adb93575		Aas38441	Aas35869	Aak69747	Ade46563	Ab133958	Ab133697	Ada71938	Aa846708	Ab134008	Aax33181	Aax33182
ABS41002	AAI07856	ABS15415	ABX63726	ACH31668	AAS35870	AAK69748	ADE46564	AAS27397	ADB93575	AAS37122	AAS38441	AAS35869	AAK69747	ADE46563	ABL33958	ABL33697	ADA71938	AAS46708	ABL34008	AAX33181	AAX33182
4	'n	9	7	8	4	4	σ	4	σ	4,	4	4	4	σ	φ	ø	7	4,	v	N	N
4185	4185	4185	992	389	644	644	644	604	604	356	251	12718	12718	12718	14006	6668	2000	5750	5750	6644	7372
36.4	36.4	36.4	35.0	25.0	23.3	23.3	23.3	14.7	14.7	6.8	4.7	4.6	4.6	4.6	o. m	9.8	3.8	3.8	3.8	3.7	3.7
564.6	564.6	564.6	542.4	388	361	361	361	227.6	227.6	138	73	71.6	71.6	71.6	61	58.6	58.4	58.4	58.4	56.8	56.8
	25	9	27	28	5	30	31	32	6	34	n N	36	۳ ا	38	39	0	4	42	43	4	24
24																					

ALIGNMENTS

RESULT 1

ADES SESSION OF THE PROPERTY O
--

```
throughput detection of differential expression of one or more throughput detection of differential expression of one or more polymucleotides in a sample. The sample is from a subject with a therosclerosis and comparison with a standard defines early, mid or late stages of the disorder. The foam cell-expressed mucleic acids are useful for thigh throughput screening of a library of molecules or compounds to identify a ligand which binds a polymucleotide. The library is chosen from DNA molecules, proteins and RNA molecules or compounds to identify at least one ligand which specifically binds a protein, for purifying a ligand from a sample for making a antibody. The compounds to identify at least one ligand which specifically binds a protein, for purifying a ligand from a sample for making a antibody. The cardiovascular disorder. The foam cell-expressed nucleic acids are useful as elements on a microarray which can be used for detecting related at the present sequence represents a cDNA whose expression is therosclerosis. The present sequence represents a cDNA whose expression is supregulated in LPS treated foam cells.
```

480 540 540 900 900 9 9 720 720 120 180 420 AAAACAAAAGGGIAAAGAGAACCCAGAIAIGGCIAAICCGICIGCAAIGAGIACAACIGC 480 120 240 241 ACATCTTGTTGATATGGGCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAA 300 361 TAAAAATGCTCCTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCA 420 TGATTGGACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACA 180 ACATCTTGTTGATATGGGCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAA 300 AGAATTGCGGAAAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAG 360 9 ATATCGTTACAAGTTGGATTTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGA 421 AAAACAAAAGGGTAAAGAGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGC TCCGATACATGAATTCAAAGCCTTCACAAATACAGCAACAGCCACAGAAGAGGATGTCAA 481 TAPAGGTTCTAAGTCACTAAAAGTTGAGCTCATAGAAGATAAAAATTATACAAAGGA ATATCGTTACAAGTTGGATTTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGA ATTTGCAAGACTACTGGGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGA 121 TGATTGGACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACA TAAAGGTTCTAAGTCACTAAAAGTTGAGCTCATAGAAGATAAAATAGATTATACAAAGGA AACACATCAGATATTTTCAGCACTAAAAGAGATGGTTTTTCCCCCACATATATGTAAAAGAA ATTTGCAAGACTACTGGGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGA TAAAAATGCTCCTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCA **AACACATCAGATATTTTCAGCACTAAAAGAGATGGTTTTTCCCCACATATATGTAAAAGAA** Gaps ö DB 9; Length 1549; Sequence 1549 BP; 609 A; 274 C; 287 G; 379 T; 0 U; 0 Other; 0; Indels ery Match 100.0%; Score 1549; st Local Similarity 100.0%; Pred. No. 0; tches 1549; Conservative 0; Mismatches 301 361 601 301 481 601 199 19 121 181 181 241 421 61

g

g

ઠે

g

ò

ద δ g

ò

\$ A

ò

B S

ઠે Dp ò

g

P_P

8 B 8

1260 1140 1020 1020 780 840 840 900 900 960 960 GAIGABAITTAGCAATGAGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAA CACCAATGATACCAAGGAAGCCCTCATTAACCATTTTCAATCTGATGATAAACAAGTATTT <u>rgaagaccarcaagragcaargaagraggaggcartrgagggggggggargattgtggaagt</u> TITACTGCCAAATAGTACTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACA TACGAAAAATAAAGTTGATTTCAGAGCATTTTAAAGCAGATTTTAAAACACTGGCAGAGTC GGAAATTAAATGGTTTGCTGTATTGGAGTTTGATCCTGAGTCTAACATGGAGTGGT 1381 GGAAATTAAATGGTTTGCTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGGT CAAAGCTTACAAAGAAAGCCGAGTAGCAAACCTTCCACTTTCCAAGTGTATATGTAGAACA TGGCACTATTCATTTGGAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGT TGAAGACCATCAAGTCCAACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGT GTTCTCTGAATGCCAATATGATTACTTCCAGATTAAAATGCAAAATTACAACAACAAAT CACCAATGATACCAAGGAAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTT 1501 GAAAACCACACCAAATGAGACGATTTCTACTCTAAATCTTTACCATCAA 1549 1381 1441 1201 901 1141 781 841 901 196 1021 1081 1261 721 781 841 961 쉱 S d 장염 8 d Š g 8 8 ò g ò g g 8 8 8 ઠે 셤 8 셤 Š 셤

AAI24129 standard; DNA; 4778 (first entry) 12-OCT-2001

Probe #14062 for gene expression analysis in human cervical cell sample. Probe; human; microarray; gene expression; cervical epithelial cell; cervical cancer; ss.

WO200157278-A2 Homo sapiens

780

GATGAAATTTAGCAATGAGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAA

721

ò

```
3579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4239
                                                                                                                                                                           4119
                                                                                                                                                                                                                                                                                                                                3999
                                                                                                                                                                                                                                                                                                                                                                                                             3939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3938 AACAAGCAAAGAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTA 3879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3699
                                                                                                                                                                                                                                                         4059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1217
                                                          677
                                                                                                                                                                                                                   797
                                                                                                                                                                                                                                                                                            857
                                                                                                                                                                                                                                                                                                                                                                          917
                                                                                                                                                                                                                                                                                                                                                                                                                                                     977
ACCTGACATGTGTATCATACCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGG
                                                                                                                                                                 1178 AAGCCTTCACAAATACAGCCACAGACAGCAGAAGAGGATGTCAAGATGAAATTTAGCAATG
                                                                                                                                                                                                                                    4118 AGGITTCCGAITTGCTTCAGCTTGTATGAAITCACGTACCAATGGCACTATTGAITTG
                                                                                                                                                                                                                                                                                                                                                                                                                 3998 AAGCCCTCATTAACCATTTCAATCTGATAAACAAGTATTTGAAGACCATCAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  978 CICIAICIGACAGAITIGITATIGAAGIGGACAITATICCACAGTICICIGAAIGCCAAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3818 ATGATTATTTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3758 AATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAAAAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1158 ATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3698 ATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGGTCCAGAAAAGCAGCAGAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGACAGGAAATCAAGATTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3578 TGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1338 ATAAATGCCACCCAGATCAAACAAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3458 CTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGGTCAAAGCTTACAAAGAAA
                                                                                 4238 ATTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCA
                                                                                                                                                                                                                                                                                                                     4058 GAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATGATAGCAAGG
                                                                                                                                                                                                                                                                                                                                                                          858 AAGCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3878 CICIAICHGACAGAITIGITAITGAAGIGGACAITAITCCACAGITCICIGAAIGCCAAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1038 ATGATTACTTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1098 AATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1218 AAAAATTCAGAGCAAAAACAAATAAAAAAGAAGAGGGGGCCAAAGTTGGTTAAATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGTATTGGAGTTTGATCCTGAGTCTAACATCGAATGGAGTGGTCAAAGGCTTACAAAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAAACCCACACAAATG
                                                            ATTITAGICIACAGCCIGAAACAGGACCAGGCAAICTCATIGAICCGAIACAIGAAIICA
                                                                                                                                          <u> AAGCCTTCACAAATACAGCAACAGCCACAGAAGAGGTTGTCAAGATGAAATTTAGCAATG</u>
                                                                                                                                                                                                                                                                                              798 GAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGACGATTTCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGACGATTTCTACTCTAAATCTTTACCATCAA 3307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABA69252 standard; DNA; 4778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3338
                                                                                                                                                                                                                                                                                                                                                                                                                                                         918
                                                              618
                                                                                                                                            678
                                                                                                                                                                                                                     738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABA69252
                           4298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
ABA69252/c
ID ABA69
XX
AC ABA69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   දු පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                            g
                                                                                                                                                                       셤
                                                                                                                                                                                                             \dot{\delta}
                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                          ર્જ
                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ર્જ
                                                  ሯ
                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1538 CCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAAAATGCTCCTAAAG 4479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCAC 4359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTATCAGAATGGCAAAGCAACCTTCCAGAAAATACAGATGATTGGACAAAAAAGG 4719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAG 4539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1478 ACCAAACTGTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGGCAAAAACAAAAAGGGTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAAAAGTIGAGCICATAGAAGATAAAATACATTATACAAAGGAAAGCCAACCATCATAG 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAG 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAAGCCCAGTAAAAATGCTCCTAAAG 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCAC 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGG 617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTATCAGAATGGCAAAGTTAACCTTCCAGAAATACAGATGATTGGACAAAAGAGG 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAAACACAGGGAAATTTTGACTG 197
                                                                                                                                                                                                                                                                                                                                                           for analyzing
                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to human single exon nucleic acid probes (SENP). The present sequence is one such probe. The SENPs are derived from human Hela cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer. Note: The sequence data for this patch of form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4718 ATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCTGAAAAACACAGGAAAATTTTGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCAAAAACAAAAGGGTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 94.9%; Score 1470.4; DB 4; Length 4778; Best Local Similarity 99.9%; Pred. No. 0; Mismatches 1471; Conservative 0; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 4778 BP; 1291 A; 911 C; 833 G; 1743 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                             useful
                                                                                                                                                                                                                                                                                                                                                           n genome-derived single exon nucleic acid probes expression in human cervical epithelial cells.
                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 25; SEQ ID NO 14062; 487pp; English
                                                                                                                                                                                                                                                                                Chen W, Rank DR
                                                                             04-FEB-2000; 2000US-0180312P.

26-MAY-2000; 2000US-0207456P.

30-UNN-2000; 2000US-006323460.

33-AUG-2000; 2000US-0063236.

21-SEP-2000; 2000US-0234687P.

27-SEP-2000; 2000US-023659P.

04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                        (MOLE-) MOLECULAR DYNAMICS INC
                                              2001WO-US000670
                                                                                                                                                                                                                                                                             Hanzel DK,
                                                                                                                                                                                                                                                                                                                   WPI; 2001-488901/53
                                           30-JAN-2001;
      09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 558
                                                                                                                                                                                                                                                                                Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                  gene
```

8 & B

8 8

\$ B \$

8 8 8 8 8 8 8

```
3578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1458
                                                                                                                                                                                                                                                                                                                                                                                                                                    1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1398
                                                                                                      618
                                                                                                                         1238
                                                                                                                                                           4178
                                                                                                                                                                                               4118
                                                                                                                                                                                                                                   4058
                                                                                                                                                                                                                                                                      3998
                                                                                                                                                                                                                                                                                                         3938
                                                                                                                                                                                                                                                                                                                                            3878
                                                                                                                                                                                                                                                                                                                                                             1038
                                                                                                                                                                                                                                                                                                                                                                               3818
                                                                                                                                                                                                                                                                                                                                                                                                  1098
                                                                                                                                                                                                                                                                                                                                                                                                                   3758
                                                                                                                                                                                                                                                                                                                                                                                                                                                       3698
                                 498
                                                                                                                                         678
                                                                                                                                                                             738
                                                                                                                                                                                                                798
                                                                                                                                                                                                                                                    828
                                                                                                                                                                                                                                                                                        918
                                                                                                                                                                                                                                                                                                                          978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   රු සි
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        $ 8 $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8
                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                              장염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                             8 6 8 6 8 6 8
                                                                                                                                                                                                           र्घ ति र्घ
                                                                                                                                                                                                                                                                염 상 염
                                                                                                                                                                                                                                                                                                                    8 B &
                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                ò
                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                4719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAG 4539
                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                        The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used from redicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a single exon nucleic acid probe of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in alectronic format directly from WIPO at ftp.wipo.int/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACTG 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTAAAG 377
                                           Human, foetal liver; gene expression; single exon nucleic acid probe; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAAGCAAAAACAAAAAGGGTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCATCACACCATCCAATTCAAATAGAACTATTCAAAGAATTGCGGAAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ccarrgaagarrcgarrcagacarcraagargggaaagcccagraaaargcrccraaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                GTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                             1 genome-derived single exon nucleic acid probes useful for expression in human fetal liver.
                                                                                                                                                                                                                                                                                                                                                                                                          Query Match

94.9%; Score 1470.4; DB 4; Length 4778;

Best Local Similarity 99.9%; Pred. No. 0;

Matches 1471; Conservative 0; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                        Sequence 4778 BP; 1291 A; 911 C; 833 G; 1743 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                         4; SEQ ID NO 17557; 639pp + Sequence Listing; English
                          single exon nucleic acid probe #17557
                                                                                                                                                                                                                           DR.
                                                                                                                                                                                                                            Rank
                                                                                                                                  04-FEB-2000; 2000US-0180312P.

26-MAY-2000; 2000US-0207456P.

30-JUN-2000; 2000US-0060840B.

03-AUG-2000; 2000US-00632366.

21-SEP-2000; 2000US-023468TP.

27-SEP-2000; 2000US-023459P.

04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                          (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                             Chen W,
                                                                                                                  2001WO-US000669
                                                                                                                                                                                                                             Ŗ,
                                                                                                                                                                                                                                               WPI; 2001-483447/52
                           Human foetal liver
                                                                                                                                                                                                                             Hanzel
                                                                              WO200157277-A2
                                                                                                                 30-JAN-2001;
                                                                                                  09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4538
                                                                                                                                                                                                                                                                                                                                                                                                                                                 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   378
                                                                                                                                                                                                                             SG,
                                                                                                                                                                                                                                                                                          Claim
                                                                                                                                                                                                                                                                Human
                                                                                                                                                                                                                              Penn
                                                                                                                                                                                                                                                                          gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 8
8 6 8 6 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
```

1397 1457 3879 1157 3639 1337 3459 4359 4299 4239 4179 4119 4059 3999 3939 3819 3759 857 977 617 677 797 917 557 737 497 rgacaggaartcargartrgraagaraartcaracrargaacagracatrcrrgraacaa ATAAATGCCACCCAGATCAAACAAAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTG CTGTATTGGAGTTTGATCCTGAGTGTCTAACATCAATGGAGTGGTCAAAGCTTACAAAGAAA GCCGAGTAGCAAACCTTTCCAAGTGTATATGTAGAACAGAAAACCACCACAAATG <u>AATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTG</u> AATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTG TGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACAA CTGTATTGGAGTTTGATCCTGAGTCTAACATCGAGTGGTCAAAGCTTACAAAGAAA ATGATTATTTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAA **ATTTCAGAGCATTTAAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGAAG** aaaaattcagagcaaaaacaaataaaaaaagaaagaggagccaaagttgaaattat ATAAATGCCACCCAGATCAAACAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTG AACAAGCAAAGAAGTGCATTCGAAGAGCCAAGATTTGTGGAAAGTTTTACTGCCAAATAGTA CTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAAT CTCTATCTGACAGATTTGTTATGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAAT AAGCCTTCACAAATACAGCAACAGCACAGAAGAGGATGTCAAGATGAAATTTAGCAATG AGGITITICCGATITICCITICAGCITGTATGAATICACGTACCAATGGCACTATICATITIG GAGTCAAAGACAAAACCCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGG AAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCC ATGATTACTTCCAGATTAAAATGCAAAATTACAACAAAAAATATGGGAACAAAAAAA AGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCAC ATTITAGICIACAGCCIGAAACAGGACCAGGCAAICICATIGAICCGAIACAIGAAIICA AAGCCTTCACAAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAATTTAGCAATG AGACGATTTCTACTCTAAATCTTTACCATCAA 1549 1518 3398

ď

```
1457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1337
                                                                                                                                                                                                                                           4119
                                                                                                                                                                                                                                                                               4059
                                                                                                                                                                                                                                                                                                                      3999
                                                                                                                                                                                                                                                                                                                                                            3939
                                                                                                                                                                                                                                                                                                                                                                                                 3879
                                                                                                                                                                                                                                                                                                                                                                                                                     1037
                                                                                                                                                                                                                                                                                                                                                                                                                                      3819
                                                                                                                                                                                                    4179
          4479
                                              4419
                                                                                    4359
                                                                                                                         4299
                                                                                                                                                               4239
                                                                                                                                                                                                                                                                                                                                         917
                                                                                                                                                                                                                        737
                                                                                                                                                                                                                                                              797
                                                                                                                                                                                                                                                                                                    857
                                                                                                                                                                                                                                                                                                                                                                              977
                            437
                                                                   497
                                                                                                        557
                                                                                                                                             617
                                                                                                                                                                                  677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATAAATGCCACCCAGATCAAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CIGIAITIGGAGITIGAICCIGAGICIAACAICAAIGGAGIGGICAAAGCITACAAAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACAA
                                                                                                                                                                                                                                                                                                                                        3938 AACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGA
                                                                                                                                                                                                                                                                                                                                                                                                                   CTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGATTACTTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTICAGAGCATTITAAACAGCAGATTITAAAACACTGGCAGAGAGTCCAGAAAAGCAGCAGAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aaaahttcagagcaaaacaaataaaaaagaaaggagggaccaaagttggtaaattat
4538 CCATTGAAGATTCGAATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTAAAG
                                                                 4238 ATTITAGICTACAGCCTGAAACAGGACCAGGCAATCTCAITGATCCGAIACAIGAAITCA
                                                                                                                                                                                                                        AAGCCTTCACAAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAATTTAGCAATG
                                                                                                                                                                                                                                   4178 AAGCCTTCACAAATACAGCAACAACAGAAGAAGATGTCAAGAATTTAGCAATG
                                                                                                                                                                                                                                                             738 AGGITTICCGATTIGCTICAGCTIGIATGAATTCACGTACCAATGGCACTATTCATTIG
                                                                                                                                                                                                                                                                        798 GAGTCAAAGACAAAACCCCCATGGGAAAATTGTTGGCATCAAAGTCACAATGATACCAAGG
                                                                                                                                                                                                                                                                                                                AACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTA
                                         ACCIGACAIGIGIAICAIAICCAITIGAIGAATICAGIAATCCAIAICGITACAAGITGG
                                                                                                                                                      618 ATTITAGICIACAGCCICAAACAGCACCAGCCAAICTCAITGAICCGAIACAIGAAIICA
                            378 ACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCAAAAACAAAAGGGTAAAG
                                                                                                        3818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3518
                                                                                                                                                                                                                                                                                                                                                                                   918
                                                                                                                                                                                                                                                                                                                                                                                                                         978
                                                                                                                                                                                                                                                                                                                                                                                                                                          3878
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1398
                                                                                                                                                                                                                            678
                                                                                                                                                 558
                                                   4478
                                                                                                            498
                                                                                                                                                                                   දු දු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ਨੇ
                                                                                                                                                               g
                                                                                                                           셤
                          8
                                              용 장
                                                                                  8 S
                                                                                                                                           ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4659.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAATGCTCCTAAAG 377
                                                                                                                                                                                                                                                                                                                                                                                     for analyzing
                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to single exon nucleic acid probes (SENP). The present sequence is one such probe. The probes are useful for producing a microarray for predicting, messuring and displaying gene expression in samples derived from human placenta. The probes are useful for antenatal dispnosis of human genetic disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCATCACACATGGACCAGCTATTCAAATAGAACAACTATTCAAAGAATTGCGGAAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTATCAGAATGGCAAAGCTAACCTTCCAGAAATACAGATGATTGGACAAAAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atgtaaatcagtggttagaaagtcataagattgaccaaaaacacaggaaattttgactg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Probe #18111 used to measure gene expression in human placenta sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match

94.9%; Score 1470.4; DB 4; Length 4778;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1471; Conservative 0; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 4778 BP; 1291 A; 911 C; 833 G; 1743 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                    Human genome-derived single exon nucleic acid probes useful gene expression in human placenta.
                                                                                                                                       Probe; microarray; human; placenta; antenatal diagnosis; genetic disorder; ss.
      AGACGATTTCTACTCTAAATCTTTACCATCAA 3307
                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 25; SEQ ID NO 18111; 654pp; English.
                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                 Rank
                                                                ВÞ
                                                                                                                                                                                                                                                 04-FEB-2000; 2000US-0180312P.
26-MX-2000; 2000US-0201456P.
30-UJN-2000; 2000US-0060840B.
03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0234687P.
04-OCT-2000; 2000GB-0024283.
                                                                                                                                                                                                                                                                                                                              (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                 Chen W,
                                                                                                                                                                                                                               30-JAN-2001; 2001WO-US000663
                                                                4778
                                                                                                      (first entry)
                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                 Penn SG, Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-488897/53
                                                       1425/c
AAI49425 standard;
                                                                                                                                                                                           WO200157272-A2
                                                                                                                                                                         Homo sapiens
                                                                                                      17-0CT-2001
                                                                                                                                                                                                              09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               318
                  3338
                                                                                   AA149425
```

g

à

8 8 8 8

g ò us-10-051-835-17.rng

Length 4778

4. DB

ø

```
8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ठ हे ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                  쉱
                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                රි සි
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ठ
                                                                                        ઠ
                                                                                                                       셤
                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human breast and BY 474 cells. The method involves contecting the probes with a collection of detectably labelled nucleic acids derived from expression of the probes are useful for verifying the expression of regions of genomic DNA predicted to encode proteins. They are useful for gene discovery, and for determining predisposition and/or proposing the toxicity of chemical agents on cells. The microarray of this invention presents a far greater diversity of probes for measuring this invention presents a far greater diversity of probes for measuring microarrays. The method is suitable for rapid production of functional information from genomic sequence. The present estate for this parted did not form part of the printed specification, but was obtained in electronic format directly from WIPO at the electronic format directly from WIPO at the wipp.int/pub/published_pot_sequences
                                                                          GCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAAAACAGAAAACCACAAATG 3339
  CTGTATTGGAGTTTGATCCTGAGTCTAACATGGAGTGGTGGTCAAAGCTTACAAAGAAA 3399
                                           GCCGAGTAGCAAACCTTCCAAGTGTATATGTAGAACAGAAAACCCACCACCAAATG 1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nseful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; microarray; single exon probe; gene expression; breast; disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New spatially-addressable set of single exon nucleic acid probes, for measuring gene expression in sample derived from human breast comprises number of single exon nucleic acid probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 4; SEQ ID NO 9939; 327pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 4778 BP; 1291 A; 911 C; 833 G; 1743 T; 0 U; 0
                                                                                                                                                                                                                                                                                                                                                                                                                         Human breast cell single exon nucleic acid probe #9939
                                                                                                                              DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rank
                                                                                                                                                                                                                                        RESULT 5
ABA51244 standard; DNA; 4778 BP.
XX
AC ABA51244;
XX
DI O-FEB-2002 (first entry)
XX
DE Human breast cell single exon now that the second microarray; single exon now that the secondary of the secondary microarray; single exon now that the secondary of the secondary microarray; single exon now that the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the secondary of the se
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MOLE-) MOLECULAR DYNAMICS INC
  3458
                                           1458
                                 8 8
                                                                                                                                 ò
                                                                                                                                                                셤
g
```

```
CTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAAT 3819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4479
                                                                                                                                                                                                                                                                                                                                                                                                            4419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAAT 1037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGATTACTTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATICICACIAITIGIGGGAGAIGGGACCAGCICIAAGGACAITACGAAAAAIAAAGIIG 1157
                                                                                         4719
                                                                                                                                                       4659
                                                                                                                                                                                                                    4599
                                                                                                                                                                                                                                                                                 4539
                              ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      716
                                                                                                                                                                                                                                                    317
                                                                                                                                                                                                                                                                                                                                                                              437
                                                                                                                                                                                                                                                                                                                                                                                                                                            497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         917
                                                                                                                                                                                        257
                                                                                                                                                                                                                                                                                                                                                                                               4298 ACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #118 AGGTTTTCCGATTTGCTTCAGCTTCAGTATTCACGTACCAATGGCACTATTTGATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTA
                                                                             GTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAATACAGATGATTGGACAAAAGAGGG
                                                                                                                                                                                                        GCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAG
                                                                                                                                                                                                                                                                                                                 CCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTAAAG
                                                                                                                                                                                                                                                                                                                                       CCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAAATGCTCCTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCTGACATGTGTATGATATCCATTTGATGAATTCAGTAATCCATATGGTTACAAGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCGGTACATGAATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                678 AAGCCTTCACAAATACAGCAACAGCCACAGAAGAGGTGTCAAGATGAAATTTAGCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCC
                                                                                                                         138 ATGTAAATCAGTGGTTAGAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACTG
                                                                                                                                             4718 ATGTABAATCAGTGGGTTAGAAAGTCATAAGATTGACCAAAAAACACAGGGAAATTTTGACTG
                                                                                                                                                                                                                                                                                                                                                                              ACCAAACTGTGTCTCAAAAGGAACGTAGAAACTTCAAAGCAAAAACAAAAAGGGTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                            AGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTITAGICTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGITITICCGATITIGCTICAGCITGTATGAATICACGTACCAATGGCACTATTCATTTTG
                                                              GTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGGATTGGACAAAAGAGG
                                                                                                                                                                                      GCATCACACATGGACCAGCTATTCAAATAGAAGTACTATTCAAAGAATTGCGGAAAAACAG
                                Gaps
                              ö
                              1; Indels
Query Match
94.9%; Score 1470.4;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1471; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          918
                                                                                                                                                                                                                        4658
                                                                                                                                                                                                                                                                                                                     318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        978
                                                                                            4778
                                                                                                                                                                                                                                                                                    4598
                                                                                                                                                                                                                                                                                                                                                   4538
                                                                                                                                                                                                                                                                                                                                                                                 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      618
                                                                                                                                                                                         198
                                                                                                                                                                                                                                                        258
                                                                                                                                                                                                                                                                                                                                                                                                                                                438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
```

```
1277
                                                                                           3579
                                                                                                               1337
                                                                                                                                   3519
                                                                                                                                                      1397
                                                                                                                                                                         ATABATGCCACCCAGATCAAACAAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTG 3459
                                                                                                                                                                                                 1457
                                                                                                                                                                                                                    3399
                                                                                                                                                                                                                                                     GCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAAACCACACCAAATG 1517
                               ATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAG
                                                                                                                                                       ATAAATGCCACCCAGATCAAACAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTG
                                                                                                                                                                                                                    AAAATTCAGAAGCAAAAAAAAAAAAAAAAAAAAAAAAGAAGGACCAAAGTTGGTTAAATTAT
                                                                                                                          CTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGGTCAAAGCTTACAAAGAAA
                                                                        AAAAATTCAGAGCAAAAAAAAAAAAAAAAAAAAAAAGAGGACCAAAGTTGGTTAAATTAT
                                                                                                                TGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACAA
                                                                                                                                                                                                                                                                                  AGACGATTTCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                                                                              AGACGATTTCTACTCTAAATCTTTACCATCAA 3307
                                                                                                                                                                                                                                                                                                                                                         ABA36171 standard; DNA; 4778
                                                                                                                                                                                                                                                                                  1518
                              1158
                                                                                                                                                        1338
                                                                                                                                                                                                                                                                                                      3338
                                                   3698
                                                                        1218
                                                                                                                1278
                                                                                                                                    3578
                                                                                                                                                                            3518
                                                                                                                                                                                                  1398
                                                                                                                                                                                                                                          1458
                                                                                                                                                                                                                                                              3398
                                              66666
                                                                                                                                                                      음 중 음
                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                 염
                        ઠે
```

```
Probe #14637 for gene expression analysis in human heart cell sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; gene expression; heart; microarray; vascular system; probe; cardiovascular disease; hypertension; cardiac arrhythmia; congenital heart disease; ss.
                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                          23-JAN-2002
                                                                                                                                                                                              ABA36171;
RESULT 6

ABA36171/(

ABA36171/(

AC ABA36

XX ABA36

DT 23-JJ

DT 23-JJ

DX PC PCD

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG

XX CONG
```

Homo sapiens

```
26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-0060B408.
03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-02346BTP.
27-SEP-2000; 2000US-023459P.
04-OCT-2000; 2000GB-00024263.
                                                                                            30-JAN-2001; 2001WO-US000666
WO200157274-A2
                                                                                                                                       04-FEB-2000;
                                          09-AUG-2001
```

exon nucleic acid probes for analyzing gene expression in human Single hearts.

絽 Rank

Chen W,

Penn SG, Hanzel DK,

(MOLE-) MOLECULAR DYNAMICS INC

NO 14637; 530pp; English SEQ ID Claim 4;

4719 4659 4599 4539 4479 4419 4418 AGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCAC 4359 4299 4239 4179 4119 4059 3999 3939 The present invention relates to single exon nucleic acid probes for measuring human gene expression in a sample derived from human heart. The present sequence is one such probe. The probes may be used for present sequence is one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease, hypertension, cardiac arrhythmias and congenital heart disease. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in alectronic form at directly from WIPO at ftp.wipo.int/pub/published_pot_sequences 257 317 437 497 557 617 677 737 797 857 4778 GTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAATACAGATGATTGGACAAAAGAGG 3998 AAGCCCTCATTAACCATTTCAATCTGATAAACAAGTATTTTGAAGACCATCAAGTCC 4718 AIGTAAAICAGIGGITAGAAAGICATAAGATIGACCAAAAACACAGGAAATITIGACTG 678 AAGCCTTCACAAATACAGCAACAGCACAGAAGAGAGGATGTCAAGATGAAATTTAGCAATG 738 AGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTATTCATTTTG GAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGG AAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCC GTATCAGAATGGCAAGCAACTTAAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGG 138 ATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACTG aacaagacgtgaatggagtcttgaagtggttaaaaaagaacatcttgttgatatgg GCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAAGA CCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAAATGCTCCTAAAG #538 CCATIGAAGATICGATICAGACATCTAAGATGGGAAAGCCCCAGTAAAAATGCTCCTAAAG accaaactgtgtctcaaaaggaacgtagagaaacttcaaagcaaaaacaaaagggtaaag ACCTGACATGTGTATCATATCCATTTCATGAATTCAGTAATCCATATCGTTACAAGTTGG 618 ATTITAGICTACAGCCIGAAACAGGACCAGGCAATCTCATIGATCCGATACATGAATTCA AGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAAGGTTCTAAGTCAC Gapa ery Match 94.9%; Score 1470.4; DB 4; Length 4778; st Local Similarity 99.9%; Pred. No. 0; tches 1471; Conservative 0; Mismatches 1; Indels 0; Sequence 4778 BP; 1291 A; 911 C; 833 G; 1743 T; 0 U; 0 Other; 828 798 78 198 258 318 378 4478 438 498 558 Query Match 8 8 8 8 8 셤 중 요 g 8 6 8 8 ò g ઠ 쉽 ò 8 8866666666668888 ઠે 셤 ઠે 셤 Š 8 8 셤

us-10-051-835-17.rng

```
04-OCT-2000; 2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                    g
 qq
                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                              1457
                                                                   3819
                                                                                      1097
                                                                                                                           1157
                                                                                                                                                3699
                                                                                                                                                                   1217
                                                                                                                                                                                       3639
                                                                                                                                                                                                          1277
                                                                                                                                                                                                                              3579
                                                                                                                                                                                                                                                 1337
                                                                                                                                                                                                                                                                    3519
                                                                                                                                                                                                                                                                                       1397
                                                                                                                                                                                                                                                                                                            3459
                                                                                                                                                                                                                                                                                                                                                                     1517
                                                                                                                                                                                                                                                                                                                                                                                  GCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAACCGCCAAATG 3339
                           3938 AACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTA 3879
                                                                                                                                                                                                                                                                                                                                                CTGTATTGGAGTTTGATCCTGAGTCTAACATGGAGTGGTCAAAGCTTACAAGAAA 3399
                                                                                                 ATGATTATTTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAA
                                                                                                                                                                   ATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAG
                                                                                                                                                                                ATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAAAAGCAGCAGAAG
                                                                                                                                                                                                         AAAAATTCAGAGCAAAAACAAATAAAAAGAAGAGAGAGCCAAAGTTGGTTAATTAT
                                                                                                                                                                                                                     ATAAATGCCACCCAGATCAAACAATTTGCTTGAAGGAAATTAAAATGGTTTG
                                                                                                                                                                                                                                                                                                    ATAAATGCCACCAGATCAAACAAAACACTTAGATTTCCTGAAGGAAATTAAAATGGTTTG
                                                CTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAAT
                                                           CTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGATTCTCTGTGAATGCCAAT
                                                                                                                                         TGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACAA
                                                                                                                                                                                                                                                                                                                              CTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGGTCAAAGCTTACAAAGAAA
                                                                                                                                                                                                                                                                                                                                                                    GCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAAACCCACACAAATG
                                                                                      ATGATTACTTCCAGATTAAAATGCAAAATTACAACAAAAATATGGGAACAAAGTAAAA
                                                                                                                            AATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTG
                                                                                                                                                                                                                                                  TGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACAA
                                                                                                                                                                                                                                                                                                                                                                                                             AGACGATTTCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                                                                                                                                                                                                       AGACGATTCTACTCTAAATCTTTACCATCAA 3307
                                                                                                                                                                                                                             3638
                                                                   3878
                                                                                      1038
                                                                                                         3818
                                                                                                                                               3758
                                                                                                                                                                                       3698
                                                                                                                                                                                                          1218
                                                                                                                                                                                                                                                                     3578
                                                                                                                                                                                                                                                                                        1338
                                                                                                                                                                                                                                                                                                            3518
                                                                                                                                                                                                                                                                                                                              1398
                                                                                                                                                                                                                                                                                                                                                  3458
                                                                                                                                                                                                                                                                                                                                                                                        3398
                                                                                                                                                                                                                                                                                                                                                                                                             1518
                                                                                                                                                                                                                                                                                                                                                                                                                               3338
                                                978
                                                                                                                            1098
                                                                                                                                                                    1158
                                                                                                                                                                                                                                                  1278
                                                                                                                                                                                                                                                                                                                                                                      1458
                                                                                                                                                                                                                                                                                                                                                                                   qa .
                                                                                                                          B &
                                                                                                                                                                 8 6 8 6 8
                                                                                                                                                                                                                                                                                                                                              g
                                                           6 8
                                                                                                     임
                                                                                                                                                                                                                                                                                     8 8 8
                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                            ò
          8,5
                                           ò
```

```
RESULT 7
AAK43354/c
ID AAK43354 standard; DNA; 4778 BP.
XX
AC AAK43354 standard; DNA; 4778 BP.
XX
AC AAK43354;
XX
DT 06-NCV-2001 (first entry)
XX
Human bone marrow expressed exon probe SEQ ID NO: 17911.
XX
Wicroarray; cancer; leukaemia; lymphoma; myeloma; ss.
XX
Homo sapiens.
XX
O9-AUG-2001.
XX
O9-AUG-2001.
XX
PD 09-AUG-2001.
XX
PP 26-MAY-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0180312P.
PR 30-JUN-2000; 2000US-00608408.
PR 30-JUN-2000; 2000US-00608408.
PR 21-SEP-2000; 2000US-0236359P.
PR 27-SEP-2000; 2000US-0236359P.
PR 27-SEP-2000; 2000US-0236359P.
```

```
4659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4239
                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                        The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is one of the probes of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          737
                                                                                                     Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human bone marrow.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGITITICCGAITIGCITCAGCITGTAIGAAITCACGIACCAAIGGCACIAITITG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAATGCTCCTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCAAAAACAAAAGGTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTATCAGAATGGCAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4718 ATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCAPACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAAGCAAAAACAAAAGGGTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  618 ATTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGCCTTCACAAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAATTTAGCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1178 pagectricacaaaracagcaacagccacagaagaggargricaagargaarrragcaarg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGITTICCGATITGCTICAGCTIGTATGAATICACGIACCAATGGCACTATICATITIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAAACACAGGGAAATTTTGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAATGCTCCTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAAGGTTCTAAGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                          GTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                   Query Match 94.9%; Score 1470.4; DB 4; Length 4778; Best Local Similarity 99.9%; Pred. No. 0; Matches 1471; Conservative 0; Mismatches 1; Indels 0;
                                                                                                                                                                Example 4; SEQ ID NO 17911; 658pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                 Sequence 4778 BP; 1291 A; 911 C; 833 G; 1743 T; 0 U; 0 Other;
                                   R,
                                   Rank
(MOLE-) MOLECULAR DYNAMICS INC
                                   Chen W,
                                     Hanzel DK,
                                                                     WPI; 2001-488900/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        738
                                                                                                                                                                                                                                                                                                                                                                                                                                                78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      498
                                     Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
1037
                                                                                                                                                                                                                                                                                                                                                                                                             3459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1517
                                                             3939
                                                                                             CICTATCTGACAGATITGTTATTGAAGTGGACAITATTCCACAGTTCTCTGAATGCCAAI 3819
                                                                                                                                                                       1097
                                                                                                                                                                                           3759
                                                                                                                                                                                                                1157
                                                                                                                                                                                                                               ATTICAGAGCATITIAAAGCAGATITITAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAG 1217
                                                                                                                                                                                                                                                                               3639
                                                                                                                                                                                                                                                                                                  AAAAATTCAGAGCAAAAAAAAAAAAAAAAAAAAAAAGAGGGACCAAAAGTTGGTTAAATTAT 1277
                                                                                                                                                                                                                                                                                                                        3579
                                                                                                                                                                                                                                                                                                                                             TGACAGGAAATCAAGATTTGTTAGATAATTCATACTAATGAACAGTACATTCTTGTAACAA 1337
                                                                                                                                                                                                                                                                                                                                                         1397
                                                                                                                                                                                                                                                                                                                                                                                                                                   1457
                                                                                                                                                                                                                                                                                                                                                                                                                                                       3399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCCGAGTAGCAAACCTTCCAAGTGTATATGTAGAACAGAAAACCACACCAAATG 3339
            917
                                                                                   977
                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGATTACTTCCAGATTAAAATGCAAAATTACAACAACAAAAATATGGGAACAAAGTAAAA
                                                                                                                                                                                                                AATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTG
                                                                                                                                                                                                                                                                              ATTICAGAGCATITAAAGCAGATTITAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAG
                                                                                                                                                                                                                                                                                                                ATAAATGCCACCAGATCAAACAAAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                             3518 ATABATGCCACCCAGATCAAACAATTAGATTTCCTGAAGGAAATTAAATGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGTATTGGAGTTTGATCCTGAGTCTAACATCGAGTGGAGTCAAAGCTTACAAAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCC
                                                                                AACAAGCAAAGAAGTGCATTCGAQAGCCAAGATTGGGAAGTTTTACTGCAAATAGTA
                                                                                                                            CTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAAT
                                                                                                                                                                                 GAGTCAAAGACAAACCCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGG
                                         AAGCCCTCATTAACCATTTCAATCTGATAAACAAGTATTTTGAAGACCATCAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGACGATITCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGACGATTTCTACTCTAAATCTTTACCATCAA 3307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3398 (
                                                                                                                                                                                                                                                                                                                                              1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1518
                                                                                                                                                                                                                                                                                                                                                                    3578
                                                                                                                                                                                                                                                                                                                                                                                                                                                         3458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3338
                                                                                                                                                 3878
                                                                                                                                                                                                                                                          1158
                                                                                                                                                                                                                                                                                                     1218
                                                                                                                                                                                                                                                                                                                          3638
                                                                                                                                                                                                                                                                                                                                                                                         1338
                                                                                                                                                                                                                                                                                                                                                                                                                                   1398
                                                                                   918
                                                                                                         3938
                                                                                                                                                                       1038
                                                                                                                                                                                                                  1098
                                                                                                                                                                                                                                      3758
                                                                                                                                                                                                                                                                                3698
                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        dd
                                                                                                                                                                                    8 8
                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                  6 S
                                                                                                                                                                                                                                                                                                ठ हे ठ
                                                                                                                                                                                                                                                                                                                                                              Dp
                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     કે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                           임
                                                                                                                                                                   ઠે
             g
                                       8
                                                      g &
                                                                                                    ద
                                                                                                                     ઠે
```

```
618 ATTTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCA
tches 1471; Conservative
                                                                                                                                                                           4538
                                                                                                                                                                                           378
                  78
                                                    138
                                                                     4718
                                                                                      198
                                                                                                        4658
                                                                                                                        258
                                                                                                                                         4598
                                                                                                                                                          318
                                                                                                                                                                                                                               438
                                                                                                                                                                                                                                                                498
                              g
                                                                                                    셤
                                                                                                                                     셤
                                                                                                                                                                      셤
                                                                                                                                                                                                         g
                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                            원
                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                  셤
                  ઠ
                                                    δ
                                                                  셤
                                                                                     δ
                                                                                                                        ઠે
                                                                                                                                                        ઠે
                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                Human; brain expressed exon; gene expression analysis; probe; microarray; Alzheimer's disease; multiple sclerosis; schizophrenia; epilepsy; cancer;
                                                                                                                                                                                                                                                 Human brain expressed single exon probe SEQ ID NO: 17536
                                                                                                                                                                                              BP.
                                                                                                                                                                                             standard; DNA; 4778
                                                                                                                                                                                                                                 (first entry)
```

WO200157275-A2 Homo sapiens

09-AUG-2001

05-NOV-2001

RESULT

677

617

```
The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is one of the probes of the invention
                                                                                                                                                                                                                                                                human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1478 ACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCAAAACAAAAGGGTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4778 GTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAATACAGATGATTGGACAAAAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCATCACACATGGACCAGCTATTCAAATAGAAGTATTCAAAGAATTGCGGAAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAAATGCTCCTAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              558 ACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1298 ACCIGACAIGIGIALCAIAICCAITIGAIGAAITCAGIAAICCAIAICGIIACAAGIIGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                gene expression in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94.9%; Score 1470.4; DB 4; Length 4778; 99.9%; Pred. No. 0; ive 0; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                                                              English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 4778 BP; 1291 A; 911 C; 833 G; 1743 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                              Example 4; SEQ ID NO 17536; 650pp + Sequence Listing;
                                                                                                                                                                                                                                                                  for analyzing
                                                                                                                                                                                                     띪
                                                                                                                                                                                                     Chen W, Rank
                                                                                                                                                                                                                                                                probes
                                                                                                                                                                      (MOLE-) MOLECULAR DYNAMICS INC
                                        , 2000US-0180312P.

2000US-0204456P.

2000US-0064386.

; 2000US-0234681P.

2000US-0234681P.

2000US-0234681P.
             2001WO-US000667
                                                                                                                                                                                                                                                                Single exon nucleic acid brains.
                                                                                                                                                                                                     Hanzel DK,
                                                                                                                                                                                                                                   WPI; 2001-483446/52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                      26-MAY-2000; 2
30-JUN-2000; 2
03-AUG-2000; 2
21-SEP-2000; 2
27-SEP-2000; 2
             30-JAN-2001;
                                                                                                                                                                                                      Penn SG,
X#X######X#X#X#X###X
```

4719

137

ö

4659

257

197

4599

4539

377

317

4479

4419

437

497

4359

```
The invention relates to a single exon nucleic acid probe (SENP) (I) for measuring human gene expression in a sample derived from human adult liver. Comprising one of 13109 defined nucleotide sequences given in the specification for complements/ fragments). The probe hybridises at high stringency to a nucleic acid molecule expressed in the human adult liver. (I) may be used for predicting, measuring and displaying gene expression in samples derived from human adult liver. The genes identified may be involved in genetic liver diseases such as cirrhosis, hyperlipoproteinaemia, hyperlipidaemia and hypercholesterolaemia which is associated with coronary heart disease. ABS25011-ABS51005 represent human liver single exon nucleic acid probes of the invention. Note: The sequence information for this patent does not appear in the printed precification but was obtained in electronic format directly from WIPO at
              Human, single exon nucleic acid probe; liver; cirrhosis;
hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
coronary heart disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4778 BP; 1291 A; 911 C; 833 G; 1743 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4; SEQ ID NO 17966; 658pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene expression in human adult liver.
                                                                                                                                                                                                                04-FEB-2000; 2000US-0180312P.
26-WX-2000; 2000US-0207456P.
30-UXX-2000; 2000US-00608408
03-AUG-2000; 2000US-0053366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0234687P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                  (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                   30-JAN-2001; 2001WO-US000664
                                                                                                                                                                                                                                                                                                                                                                                   Penn SG, Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-488898/53.
                                                                                                                 WO200157273-A2
                                                                                     Homo sapiens.
                                                                                                                                                   09-AUG-2001.
   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1517
                                                                                                                                                                                                                   3999
                                                                                                                                                                                                                                                                                                                                                                                                                     3819
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGTATTGGAGTTTGATCCTGAGTCTAACATCGAGTGGAGTGGTCAAAGCTTACAAGAAA 3399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4119
                                                                                                                                          4118 AGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTATTCATTTTG 4059
                                                                                                                                                                                                                                                                                 3998 AAGCCCTCATTAACCATTTCAATCTGATAAACAAGTATTTTGAAGACCATCAAGTCC 3939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1158 ATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAG 1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATAAATGCCACCCAGATCAAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTG 1397
AACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTA 3879
                                                                                                                                                                                                                                                                                                                                                                                   CTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTTGTAATGCCAAT 1037
                                                                                                                 797
                                                                                                                                                                                 857
                                                                                                                                                                                                                                                 917
                                                                                                                                                                                                                                                                                                                   977
                                                 737
                                                                                                                                                                                                              1058 GAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTICAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3638 AAAATTCAGAGCAAAAAAAAAAAAAAAAGAAAGAAGGAGGACCAAAGTTGGTTAAATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATAAATGCCACCCAGATCAAACAAAACACTTAGATTTCCTGAAGGAAATTAAAATGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGGTCAAAGCTTACAAAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAAACCACACCAAATG
                                                                                1178 AAGCCTTCACAAATACAGCAACAGCCACAGAAGAGGAGGATGTCAAGATGAAATTTAGCAATG
                                                                                                                                                                                                                                                                                                                   AACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                  3878 CTCTATCTGACAGATTTGTTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3818 ATGATTATTTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACAA
                                                                                                                                                                                   GAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGG
                                                                                                                                                                                                                                                   AAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGATTACTTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>AAAAATTCAGAGCAAAAACAAATAAAAAAGAAAGAGGGGGGGCCAAAGTTGGTTAAATTAT</u>
                                                   AAGCCTTCACAAATACAGCAACAGCCACAGAAGAGAGGATGTCAAGATGAAATTTAGCAATG
                                                                                                                   AGGITITICCGAITITGCITICAGCITGTAIGAAITCACGIACCAAIGGCACIAITICAITITIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGACGATITCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3938
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1518
                                                                                                                                                                                   798
                                                                                                                                                                                                                                                   828
                                                                                                                                                                                                                                                                                                                     918
                                                                                                                                                                                                                                                                                                                                                                                     978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3338
                                                                                                                 738
                                                 678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            දු දු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                        g
                                                                                                                                                                                                         Ď
                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                   8 8
                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                            ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   දු පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ठ
                                                 ò
                                                                            a
                                                                                                          õ
                                                                                                                                                                                ò
                                                                                                                                                                                                                                              õ
```

exon nucleic acid probes useful for analyzing

genome-derived single

DR;

Rank

Chen W,

```
4719
                                                                                                                                                                                                                                             4599
                                                                                                                                                                                                                                                                                                                                                                                     4479
                                                                                                                                                                           4659
                                                                                                                                         197
                                                                                                                                                                                                                                                                                 317
                                                                                                                                                                                                                                4718 ATGTAAAATCAGTGGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACTG
                                                                                                                                                                                                                                                                                                                  4598 GCATCACACATGGACCAGCTATTCAAATAGAAGTACTATTCAAAGAATTGCGGAAAACAG
                                                                                                                                                                                                                                                                                                                                                    CCATTGAAGATTCGGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAAATGCTCCTAAAG
                                                                      GTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGG
                                                                                                    4778 GTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGG
                                                                                                                                         138 ATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGAAATTTTGACTG
                                                                                                                                                                                                              GCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAAACAG
                                     Gaps
94.9%; Score 1470.4; DB 4; Length 4778; larity 99.9%; Pred. No. 0; Conservative 0; Mismatches 1; Indels 0;
                    Best Local Similarity
Matches 1471; Conserv
                                                                                                                                                                                                                                                 4658
                                                                                                                                                                                                                                                                                                                                                                                       4538
                                                                        78
                                                                                                                                                                                                                198
                                                                                                                                                                                                                                                                                   258
                                                                                                                                                                                                                                                                                                                                                       318
     Query Match
                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                             ď
                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                            No 17966.
                                                                                                                                                                                                                                                                                                                                                                                                        Human liver single exon probe, SEQ ID
```

DNA; 4778

standard;

25-FEB-2003

RESULT 9
ABS42976/c
ID ABS42976 s
XX
AC ABS42976;
XX
DT 25-FEB-200
XX
DT 25-FEB-200

```
The present invention relates to novel single exon nucleic acid probes. The present sequence is one such probe. The probes are useful for measuring human gene expression in a human breast sample, where the probe hybridises at high stringency to a nucleic acid expressed in the human breast. The probes are useful for predicting, diagnosing, grading, particularly those diseases with polygenic actiology. The diseases include: breast cancer, disorders of development, inflammatory diseases include: breast, chibrocyttic changes, proliferative breast disease and noncarcinoma tumours. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pot_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    to measuring gene expression in
                                                                                                                                                                                                                                                                                                                                                                                                                                                              probe; human; breast disease; breast cancer; development disorder; ss; inflammatory disease; proliferative breast disease; non-carcinoma tumour.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      78 GTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gape
                                                                                                                                                                                                                                                                                                                                                                                                             Probe #9694 used to measure gene expression in human breast sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94.9%; Score 1470.4; DB 5; Length 4778; 99.9%; Pred. No. 0; ive 0; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 4778 BP; 1291 A; 911 C; 833 G; 1743 T; 0 U; 0 Other;
                                                                                                                            agacgairticractchaaarcritaccarcaa 3307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         single exon nucleic acid probe used
                                                                                   AGACGATTTCTACTCTAAATCTTTACCATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 25; SEQ ID NO 9694; 322pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chen W, Rank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-FEB-2000; 2000US-0180312P.
26-MX-2000; 2000US-0207456P.
30-UJN-2000; 2000US-00608408.
03-AUG-2000; 2000US-00532366.
21-SEP-2000; 2000US-023468TP.
21-SEP-2000; 2000US-023468TP.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                 AAI09703 standard; DNA; 4778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-JAN-2001; 2001WO-US000661
                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 99.9
Matches 1471; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Penn SG, Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-476286/51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #0200157270-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a human breast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Probe; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                     09-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              138
                                     3398
                                                                                                                                       3338
                                                                                                                                                                                                                                                                                                                    AA109703;
                                                                                         1518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel
                                                                                                                                                                                                                AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/
AMAIO9703/

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                     셤
                                                                                      δ
                                                                                                                            용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3758 AATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTG 3699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3578 reacaggaartcaagartrerracaraarrcaracrargaacagracarrcrrerakaa 3519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1098 AATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAATAAAGTTG 1157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1158 ATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAAAGCAGCAGAAAG 1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGGTCAAAGCTTACAAAGAAA 1457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1458 GCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAAACCACACAAATG 1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGCCTTCACAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAATTTAGCAATG 4119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAAT 1037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1038 ATGATTACTTCCAGATTAAAATGCAAAATTACAACAAAAATATGGGAACAAAGTAAAA 1097
                                                                                                                                                                                                                                                                                                                                                                       4239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4118 AGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTATTCATTTTG 4059
                                                                4419
                                                                                                                                                                  4359
                                                                                                                                                                                                                                                                      917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACAAGCAAAGAAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTA 977
                                                                                                                                                                                                                                                                                                                                                                                                                     677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              797
                                                                                                                                                                                                                                                                                                                       617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGTCAAAGACAAAACCCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGG 857
                                                                                                              497
                                                                                                                                                                                                                     557
                437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATAAATGCCACCCAGATCAAACAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGAAAGCTTACAAAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1218 AAAAATTCAGAGCAAAAAAAAATAAAAAGAAAGAAGGGACCAAAGTTGGTTAAATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGTCAAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACGCACCACGAATGATACCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCC
                                             TAAAAGTTGAGCTCATAGAAGATAAAATAGATTATACAAAGGAAAGGCAACCATAG
                                                                                                                                                                                                                                                                                                                    ACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGG
                                                                                                                                                                                                                                                                                                                                                                     4298 ACCTGACATGTGTATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                           ATTITAGECTACAGCCTGAAACAGGACCAGGCAAECTCAETGAETCCGAEACAEGAATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGCCTTCACAAATACAGCAAACAGCCACAGAAGAGGATGTCAAGATGAAATTTAGCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTATTCATTTTG
                                                                                                                 438 AGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1398
                                                                                                                                                                                                                                                                                                                                                                                                                             618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3518
                                                                                                                                                                                                                        498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   738
                                                                                                                                                                                                                                                                                                                            558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           978
                                                                   4478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 , 'B
```

d ò g

<u>ዋ</u> ጵ

 δ

8 8 8

\$ B \$

g

g

ö

ò

g ò g ð g Š g ઠે d ô

셤

ઠે

දු දු

8 8 8

엄 ઠે

8 8

 δ

음 장 유 6 B 6

```
CTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGGTCAAAGCTTACAAAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; ds; single exon probe; asthma; lung cancer; COPD; ILD; chronic obstructive pulmonary disease; interstitial lung disease; familial idiopathic pulmonary fibrosis; neurofibromatosis; tuberous sclerosis; gaucher's disease; Niemann-Pick disease; Hermansky-Pudlak syndrome; sarcoidosis; pulmonary haemosiderosis; pulmonary haemosiderosis; pulmonary alveolar proteinosis; librocystic pulmonary dysplasia; primary ciliary dyskinesis; pulmonary hypertension; primary ciliary dyskinesis; pulmonary hypertension; hyaline membrane disease; open reading frame; ORF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human lung comprising single exon nucleic acid probes having one 12614 nucleic acid sequences mentioned in the specification, or their
                                       GCCGAGTAGCAAACCTTCCATTTCCAAGTGTATATGTAGAAAACAGAAAACCACACAAATG
                   TGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACAA
                                                                                                            ATAAATGCCACCCAGATCAAACAAAACACTTAGATTTCCTGAAGGAAATTAAAATGGTTTG
                                                                                                                                                                                                   CTGTATTGGAGTTTGATCCTGAGTCTAACATCGAGTGGTGGTCAAAGGTTACAAAGAAA
                                                                                                                                                                                                                                                                                               GCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAAACCACACAAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleic acid probes, used to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    exon probe ORF from lung SEQ ID No 17428.
                                                                                                                                                                                                                                                                                                                                                                                     AGACGATTTCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                                                                                                                                                                                                     AGACGATTICTACTCTAAATCTTTACCATCAA 3307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 measure gene expression in human lung samples
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         single exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ID NO 17428; 634pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         , 2000US-0180312P.
, 2000US-0204456P.
, 2000US-006032366.
, 2000US-0234687P.
, 2000US-0234687P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         늉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     437/c
ABS17437 standard; DNA; 4778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001WO-US000665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human genome-derived single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         set
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Spatially-addressable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-114183/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200186003-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-FEB-2000; 2
26-MAY-2000; 2
30-UIN-2000; 2
03-AUG-2000; 2
21-SEP-2000; 2
24-OCT-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 4; SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                        1518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABS17437;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Penn SG,
                                                                3578
                                                                                                            1338
                                                                                                                                                         3518
                                                                                                                                                                                                      1398
                                                                                                                                                                                                                                                  3458
                                                                                                                                                                                                                                                                                                 1458
                                                                                                                                                                                                                                                                                                                                           3398
                                                                                                                                                                                                                                                                                                                                                                                                                                       3338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
XX ABS17437/C
XX AC
XX ABS17
XX ABS17
XX ABS17
XX ABS17
XX ABS17
XX ABS17
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai
XX Humai

                                                                                                                                             a
                                                                                                                                                                                                                                        셤
                        8 8
                                                                                                   ð
                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                            8 8
                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1277
                                                                                                                                                                                                                                                                           4479
                                                                                                                                                                                                                                                                                                                                                                    4419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCTAICTGACAGATTIGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAAT 1037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTG 1157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTICAGAGCATTITAAAGCAGATTITAAAACACTGGCAGAGGTCCCAGAAAAGCAGCAGCAGAAG 1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTTCAGAGCATTTAAAGCAGATTTTAAAACACTCGGCAGAGTCCAGAAAAGCAGCAGAAG 3639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4599
                                                                                                                                                                                  4539
                                                                                                                                                                                                                                                                                                                                                                                                                                                               4359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTITAGECTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCA 4179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGG 3999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGATTATTTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAA 3759
ATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACACAGGAAATTTTGACTG 4659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            857
                                                                                                                                   317
                                                                                                                                                                                                                              377
                                                                                                                                                                                                                                                                                                                       437
                                                                                                                                                                                                                                                                                                                                                                                                                   497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGTTTTCCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTATTCATTTTG 797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTA 977
                                                                                                                                                                GCATCACACATGGACCACCACTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAG
                                                                                                                                                                                                                                                                           ccarrigaagarricgarricagacarcraagargggaaagcccagraaaargcrccraaag
                                                                                                                                                                                                                                                                                                                                                   AGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAAGGTTCTAAGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCTGACATGTGTTTTATCATATCCATTTTGATGAATTCAGTAATCCATATCGTTACAAGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGCCTTCACAAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAATTTAGCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCCTTCACAAATACAGCCACAGCACAGAAGAGATGTCAAGATGAAATTTAGCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTATTCATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGTCAAAGACAAACCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGATTACTTCCAGATTAAAATGCAAAATTACAACAAAATTATGGGAACAAAGTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAG
                                                                                                                                                                                                                                 CCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAATGCTCCTAAAG
                                                                                                                                                                                                                                                                                                                       ACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAAGCAAAAACAAAAGGGTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                   AGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCC
                                            AACAAGACGTGAATGGAGCAGTCTTGAAGTGGTTAAAAAAAGGAACATCTTGTTGATATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3638
4718
                                                                                         4658
                                                                                                                                                                                  4598
                                                                                                                                                                                                                                                                           4538
                                                                                                                                                                                                                                                                                                                                                                    4478
                                                                                                                                                                                                                                                                                                                                                                                                                                                               4418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1218
                                                                                                                                     258
                                                                                                                                                                                                                                 318
                                                                                                                                                                                                                                                                                                                          378
                                                                                                                                                                                                                                                                                                                                                                                                                   438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          978
                                            198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               498
```

\$ B \$ B \$ B \$ B \$

8 8 8

र्छ हि र्छ

음 성 음

8 6 8

οĘ

8 B 8

8 8 8

C complements or the 12387 open reading Izames derived from the 12014 probes. Also included are a microarray comprising the novel set of probes which hybridise at high stringency to a nucleic acid expressed in the human lung; measuring gene expression in a sample derived from human lung; measuring gene expression in a sample carle expression of detectably labeled mucleic acids derived from human lung measuring the label detectably bound to each probe of the carray; identifying exons in a enkaryotic genome, comprising (a) array; identifying exons in a enkaryotic genome, comprising (a) the extray; identifying at last one exon from genomic sequences of the enkaryote; and (b) detecting specific hybridisation of detectably bound to labeled nucleic acids from eukaryote lung mRNA, to a single exon probe, that identifying at last one exon from genomic sequence of in the above mentioned microarray; assigning exons to a single gene, comprising (a) identifying exons from genomic sequence by the method a bove and (b) measuring the expression of each of the exons in several customers and/or cell types using hybridisation to a single gene, a peptide comprising one of the exons should be assigned to a single gene; a peptide comprising one of the exons should be assigned to a single gene; a peptide comprising one of 12011 sequences, mentioned in the probes are used for gene expression analysis, and for identifying exons in a gene, particularly using human clustom explains and for identifying exons in a gene, particularly using human clustomers, chronic obstructive pulmonary disease such as asthma. Lung derived mRNA and for the stude (CCPP), interstitial lung disease (ILD), familial idiopathic pulmonary fibrosis, pulmonary soliarry compared syndrome, sarcoidosis, pulmonary disease (OCPP), interstitial lung disease (ILD), familial idiopathic pulmonary disease (OCPP), interstitial lung cancer, chronic obstructive pulmonary disease, viewment sequence is a single exon probe poper.

C pudlak syndrome, sarcoidosis, pulmonary dispate

Sequence 4778 BP; 1291 A; 911 C; 833 G; 1743 T; 0 U; 0 Other;

셤 ठ g දු දු

ð

4778 GTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAAGG 4719 4599 4299 4718 ATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACTG 4659 137 437 257 317 377 557 197 78 GTATCAGAATGGCAAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGG AIGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGAAATTTTGACTG CCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTAAAG GCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAG ACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAAGCAAAAAACAAAAAGGGTAAAA Query Match
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1471; Conservative 0; Mismatches 1; Indels 0; 4538 138 258 318 378 4418 438 498

음 성 음

8 8 8

6 6 6

1337 3459 4179 4119 3999 3939 1157 977 677 857 3638 AAAAATTCAGAGCAAAAACAAATAAAAAGAAAGAGAGGGGCCAAAGTTGGTTAAATTAT 3518 ATAAATGCCACCCAGATCAAACAAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTG 3398 GCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAAACCACACAAATG AACAAGGAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTA 1158 ATTICAGAGCATTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGGAGAGAG 1458 GCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAAACCACCACAAATG CTCTATCTGACAGATTTGTTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAAT ATGATTACTTCCAGATTAAAATGCAAAATTACAACAACAAAAATATGGGAACAAAGTAAAA AAAAATTCAGAGCAAAAAAAAAAAAAAAAAAAGAAGGAGCCAAAGTTGGTTAAATTAT TGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACAA 1338 ATAAATGCCACCCAGATCAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTG AAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCC 558 ACCIGACAIGIGIAICAIAICCAITIGAIGAAITCAGTAAICCAIAICGITACAAGIIGG 4238 ATTINGTCIACAGCCTGAAACAGGACCAGGCAATCTCAFTGATCCGAIACATGAATTCA **AAGCCTTCACAAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAATTTAGCAATG** GAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGG 1518 AGACGATTTCTACTCTAAATCTTTACCATCAA 1549 RESULT 12 AAI58244 LD AAI58244 Btandard; cDNA; 4771 XX 678 3998 3818 3698 1218 1278 3578 618 4058 3938 978 3878 1038 1098 3758 828 918 198 g 셤 ઠે 셤 셤 के व g 8 6 8 6 8 8 6 8 6 8 6 g ઠે g 8 ઠે ò 8 8 8 6 ठ ö 셤

385

300 445 360 505 420 565 480 625 540 685 600 745

```
AAI58244;
         Novel
```

```
GACAGATITIGITATIGAAGIGGACATIATICCACAGITCTCTGAATGCCAATATGATIAC 1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAAGCAGCAGAAAAAATTC 1225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACAAATACAGCAAACAGCCACAGAAGAAGATGTCAAGATGAAATTTAGCAATGAGGTTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTGATTTCAGA
CAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACTGAACAAGAC
                                                           121 GTGAATGGAGCAGTCTTGAAGTGGTTAAAAAAAAAAACAACTTTGTTGATATGGGCATCACA
                                                                                                                                     301 GTGTCTCAAAAGGAACGTAGAGAAAACTTCAAAGCAAAAACAAAAAGGGTAAAGAGAGAACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                              CTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATTCAAAGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTATTCATTTTGGAGTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGGAAGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCACTGTAGATACCAAGGAAGCACCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTAACCATTTCAATCTGATGATAACAAGTATTTTGAAGACCATCAAGTCCAACAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841 AAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACAGATTTGTTATTGAAGTGGACATTATTCCACAGAGTTCTCTGAATGCCAATATGATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TICCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAAAATTCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAGAAAAATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGAGCAAAAACAAATAAAAAAAAAAAAGAGGACCAAAGTTGGTTAAATTATTGACAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGGGAAAACAGCCATTGAA
                                                                                                                                                                                                                           241 GATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTAAAGACCAAACT
                                                                                                                                                                                                                                                                    GTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCAAAAACAAAAGGGTAAAGAAACCCA
                                                                                                                                                                                                                                                                                                                                                                      361 GATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTTCAAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGGATTTTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCAAAGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAATTTAGCAATGAGGTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCCAACAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAAAATTCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTAAAGACCAAACT
                                                                                                                                                                                                                                                                                                                                              GATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCACTAAAAGTT
                                                                                                                                                                                                                                                                    386
                                                                                                                                                                                                                                                                                                                                                446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1141
                                                                                                                                                                                                                                                                                                                                                                                                                            206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1081
                                                                                                              266
                                                                                                                                                                                          326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        866
    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 &
                                                                                                                                                                                                                                                                  상 원
                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ሪ ස ሪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     음 중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                     8 8
                                                                                                                                           ద
                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                     셤
                                    ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM3642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polymucleotides are useful in gene therapy. A composition containing a polypeptide or polymucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral nervous system, such as peripheral nervous injuries, peripheral nervous system diseases, such as Alzheimer's Parkinson's disease, fluntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic assets for receptor activity, arthritis and inflammation, leukaemas and chrombolytic activity, arthritis and inflammation, leukaemas and C.N.S disorders. Note: The sequence data for this patent did not form
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ě,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wang D;
Zhao (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                86 ATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGGATGAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nootropic; immunosuppressant; cytostatic; gene therapy; cancer; eral nervous system; neuropathy; central nervous system; CNS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                 peripheral nervous system, neuropathy; central nervous system; CNS; Alzabaimer's, Parkinson's disease; hemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemocactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        vel nucleic acids and polypeptides, useful for treating disorders central nervous system injuries.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ر.
ر
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94.4%; Score 1462.4; DB 4; Length 4771; 99.9%; Pred. No. 0; Live 0; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ren F,
Zhang J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 4771 BP; 1740 A; 833 C; 909 G; 1289 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qian XB,
Yang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Υ,
Α.Τ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 447; 10078pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chen R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Liu C, Asundi V, Chen R, Wang Z, Wehrman T, Xu C, Goodrich R, Drmanac RT;
                                                                           Human polynucleotide SEQ ID NO 447.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               part of the printed specification
                                                                                                                                                                                                                                                                                                                                                                                                   23-DEC-1999; 99US-00471275.
21-JAN-2000; 2000US-0058317.
25-APR-2000; 2000US-00552317.
20-JUN-2000; 2000US-00598042.
19-JUL-2000; 2000US-00653450.
14-SEP-2000; 2000US-00653450.
14-SEP-2000; 2000US-00653450.
19-OCT-2000; 2000US-00693036.
29-NOV-2000; 2000US-00693036.
                                                                                                                                                                                                                                                                                                                                                                  26-DEC-2000; 2000WO-US034263
                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 99.9
Matches 1463; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-442253/47.
P-PSDB; AAM39088.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                      WO200153312-A1
                                                                                                                                                                                                               leukaemia; вв
                                                                                                                                                                                                                                                   Homo sapiens.
                                         22-OCT-2001
                                                                                                                                                                                                                                                                                                                           26-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tang YT,
Wang J, Y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              146
```

660

805 720 865 925 840 985 900

780

1020 1165

960

1080

1200

qq ઠ

δ

```
1320
                                                                                                         1405
                                                                                                                                                                                                                                                   GAGTTTGATCCTGAGTCTAACATCAATGGAGTGGTCAAAGCTTACAAAGGAAAGCCGAGTA 1380
                                                    1260
                                                                                                                                                                                                                                                                                                                               1440
  1345
                                                                                                                                                                                                                  The invention relates to a polynucleotide comprising a sequence given in the specification, or its mature protein-coding portion, or its complement. The polynucleotide is useful for treating diseases e.g., cancer or neurodegenerative diseases and many others listed in the specification. The present sequence represents a novel human cDNA. Note: The sequence data for this patent did not form part of the printed specification but was obtained in electronic format directly from USPTO at segdata.uspto.gov/sequence.html?DocID=20030104529.
                                                                                                                                                                                                                                                                                                                                                               1381 GCAAACCTTCCAACTGTATATGTAGAACAAAAAACCACACAACGAATT
                             1261 CACCCAGATCAAACAAAACACTTAGATTTCCTGAAAGGAAATTAAATGGTTTGCTGTATTG
CACCCAGATCAAACAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTGCTGTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New polynucleotide, useful for treating diseases e.g., cancer neurodegenerative diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Drmanac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ss; cancer; neurodegenerative disease; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 121; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Asundi V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel human cDNA SEQ ID NO 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADB48211 standard; cDNA; 4771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-JAN-2000; 2000US-00488725.
25-APR-2000; 2000US-00552317.
19-JUL-2000; 2000US-00620312.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-JAN-2002; 2002US-00037270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-DEC-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Liu C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ZHOU/) ZHOU P.
(TANG/) TANG Y T.
(LIUC/) LIU C.
(ASUN/) ASUNDI V.
(DRMA/) DRMANAC R T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-678194/64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tang YT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2003104529-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUN-2003
                                                                                                                                                                                                                                                                       1321
                                                                                                                                                                                                                  1406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1441
  1286
                                                    1201
                                                                                                         1346
                                                                                                                                                                                                                                                                                                                               1466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADB48211;
                                                                                                                                                                                                                                                                                                                                                                                                                                     1526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Zhou P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADB48511

ADB48511

ADB48511

ADB48511

ADB48511

ADB48511

ADB48511

ACC CADB48

ACC The F

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB48

ACC CADB4
                                      g
                                                                                                                                            g
                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                    gg .
                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                           3
```

DB 8; Length 4771;

Sequence 4771 BP; 1740 A; 833 C; 909 G; 1289 T; 0 U; 0 Other;

94.4%; Score 1462.4;

Query Match

```
1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                986 GACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAATATGATTAC 1045
         ö
                             145
                                                                         205
                                                                                             120
                                                                                                                                                                                  240
                                                                                                                                                                                                                                                    445
                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                              505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       960
                                                                                                                   265
                                                                                                                                        180
                                                                                                                                                              325
                                                                                                                                                                                                         385
                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                          565
                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                    625
                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                685
                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      985
                                                 9
                                                                         146 CAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACTGAACAAGAC
                                                                                   61 CAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACTGAACAAGAC
                                                                                                                                                            266 CATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAGCCATTGAA
                                                                                                                                                                            241 GATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTAAAGACCAAAACT
                                                                                                                                                                                                                                                                    301 GIGICICAAAAGGAACGIAGAGAAACITCAAAGGAAAAACAAAAAGGGIAAAGGAAAGCCA
                                                                                                                                                                                                                                                                                                            ACAAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAATTTAGCAATGAGGTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661 ceartrecriteacerterareaartreaceraeceaareecaarteartrifeagereaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721 GACAAACCCCATGGGAAAATTGTTGGTGTCAAAAGTCACCAATGATACCAAGGAAGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781 ATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCCAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841 AAGAAGTGCATTCGAGAGCCAAGATTGTGGAAGTTTTACTGCCAAATAGTACTCTATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCCAGATTAAAATGCAAAATTACAACAAAAATATGGGAACAAAGTAAAAAATTCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTGATTTCAGA
                              86 ATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGAATTGGACAAAAAGAGATGTAAAT
                                                1 ATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGGGATGTAAAT
                                                                                                                   GTGAATGGAGCAGTCTTGAAGTGGTTAAAAAAAAAACATCTTGTTGATATGGGCATCACA
                                                                                                                               446 GATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCACTAAAAGTT
                                                                                                                                                                                                                                                                                                                                          TGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGGATTTTAGT
                                                                                                                                                                                                                                                                                                                                                                                                   CTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCAAAGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                              CTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCAAAGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTATTCATTTTGGAGTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  806 GACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGGAAGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTAACCATTTCAATCTGATGATAACAAGTATTTTGAAGACCATCAAGTCCAACAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      926 AAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTATCT
                                                                                                                                                                                                          GATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTAAAGACCAAACT
         Gaps
         ;
0
          Indels
          Ĥ
Pred. No. 0;
); Mismatches
          ö
186.66
Best Local Similarity 99.9
Matches 1463; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1046
                                                                                                                                                                                                                                                                                                                                           206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1106
                                                                                                                                                                                                                                                                                                                                                                                      999
                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                    206
                                                                                                                                                                                                          326
                                                                                                                                                                                                                                                     386
                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                             ď
                                                                                                                                                                                                                                                                                                                                                                                                    ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유 상 R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6 6 6 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            상
유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ठ हे ठ
                                                                                             셤
                                                                                                                                      g
                                                                                                                                                                              셤
                                                                                                                                                                                                   ⋩
                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                             ठे
                                                                                                                                                                                                                                                                                                              중 유
                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                             상
음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                         8
                                                                                                                   8
                                                                                                                                                              ठे
                                                                                                                                                                                                                                              8
```

```
WPI; 2001-235201/24.
P-PSDB; AAU00294.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   999
                                                                                                                                                                                                                                                                                                                                                                                 146
                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                       566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              446
                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                     206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                     disease
 음
                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                              1440
                                                                     1200
                                                                                       1345
                                                                                                                         1405
                                                                                                                                        1320
                                                                                                                                                                           1380
                                                                                                                                                                                             1525
                                                                                                       1260
                                                                                                                                                           1465
CTAITTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTGATTTCAGA 1080
                                                                                                                                                                                                                                                                                                                                                              Interferon induced nucleic acid; autoimmune disease; lupus erythematosus; fimunodeficiency stroke; acquired immunodeficiency stroke; acquired immunodeficiency stroke; hilbs; graft rejection; viral infection; hepatitis; aplastic anaemia; cancer; human immunodeficiency virus; HIV; immune-mediated glomerulonephritis; human immunodeficiency virus; HIV; immune-mediated glomerulonephritis; heamarologic disease; Ancoinc neutropenia; myocardial infarction; neutrological disease; Alzheimer's disease; tumour; amyotrophic lateral sclerosis; spinal muscular atrophy; human; IFN2; ds.
                                                                                                                       CACCCAGATCAAACAATTAGATTTCCTGAAGGAAATTAAATGGTTTGCTGTTTG
                                                                                                                                                                                                       GCAAACCTTCCAAGTGTATATGTAGAACAGAAAACCACCACCAATGAGACGTT
                  GCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAAAATTC
                                                                     1141 AGAGCAAAAACAATAAAAAGAAAGAGAGGGACCAAAGTTGGTTAAATTATTGACAGGA
                                                                                                 CACCCAGATCAAACAAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTGCTGTATTG
                                                                                                                                                         GCAAACCTTCCAAGTGTATATGTAGAACAGAAAACCACCACCAAATGAGACGATT
                                 1081 GCATTTAAAGCAGATTTTAAAACACTGGCAGAGCCCAGAAAAAGCGGGAGCAGAAAAATTC
                                                                                       AATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACAATAAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /product= "IFN2"
/note= "Interferon induced polypeptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Han
                                                                                                                                                                                                                               TCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                               rcracrcraarcriraccarcaa 1464
                                                                                                                                                                                                                                                                                                                                                Interferon induced nucleic acid, IFN2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
1. .4770
/*tag= a
/product= "IFN2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hochman P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-SEP-1999; 99US-0152921P.
20-067-1999; 99US-0160F3FP.
20-JAN-2000; 2000US-0171104P.
07-SEP-2000; 2000US-00656633.
                                                                                                                                                                                                                                                                                            standard; DNA; 6233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-SEP-2000; 2000WO-US024704
                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Da Silva A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURAGEN CORP.
BIOGEN INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200118208-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                              12-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-MAR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peyman JA,
                                                                                                                                                                                                                                                                                                             AAS01147;
                  1166
                                                                                       1286
                                                                                                        1201
                                                                                                                         1346
                                                                                                                                         1261
                                                                                                                                                                           1321
                                                                                                                                                                                             1466
                                                                                                                                                                                                              1381
                                                                                                                                                                                                                               1526
                                                                                                                                                                                                                                                 1441
                                                                                                                                                                                                                                                                                           AAS01147
                                                                                                                                                           1406
                                                     1226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CURA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (BIOJ)
                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo
                                                                                                                                                                                                                                                                           RESULT 14
                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                   8 8
                                                                                                                                                                                            & g
                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                              셤
                                 셤
                                                    ð
                                                                   임
                                                                                      ઠ
                                                                                                   성 음
                ò
```

```
The sequence represents interferon induced mucleic acid, IFN2. IFN nucleic acids and polypeptides are useful for treating or preventing a concleic acids and polypeptides are useful for treating or preventing a determining the presence of or predisposition to a disease associated with altered levels of IFN polypeptide or polynucleotide. IFN nucleic acids, polypeptides and antibodies are useful for diagnosis, prevention or treatment of variety of immunological and cell proliferative disorders, such as autoimmune diseases e.g. lupus erythematosus, immunodeficiency diseases such as acquired immunodeficiency syndrome (AIDS), graft rejection, viral infections including hepatitis and human immunodeficiency virus (HIV), immune mediated glomerulonephritis, hematologic diseases such as aplastic anaemia and chronic neutropenia and cancer. In addition they are also useful for treating or diagnosing various disorders associated with cell death, including Mycardial infarction, stroke, neurological diseases including Alzheimer's and infarction, stroke, neurological diseases including Alzheimer's and cancentry. IFN nucleic acids and polypeptides are also useful for atrophy. IFN nucleic acids and polypeptides are also useful for carophy. IFN nucleic acids and polypeptides are also useful for strophy. IFN nucleic acids and polypeptides are also useful for dentifying interferon-like proteins and interferon agonists, for screening drugs and compounds which inhibit or enhance IFN activity or function and as targets for the identification of small molecules that are immunostimulatory, immunosuppressive, or stimulate or suppress normal call or tumour cell growth in mammals, including humans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAATGCTCCTAAAGACCAAACT 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
New interferon induced polypeptides and polynucleotides, useful for the diagnosis, prevention and treatment of immunological, cell proliferative disorders, such as lupus erythematosus, cancer, stroke and Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAATGGAGCAGTCTTGAAGAGAGAACATCTTGTTGTTGATATGGGCATCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATGGACCAGCTATTCAAATAGAAGAACTATTCAAAAGAATTGCGGAAAAACAGCCATTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGAGAAATTTTGACTGAACAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAGCCATTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301 GTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCAAAAACAAAAGGGTAAAGAGAAACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGGATTTTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     86 ATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGGATGTAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 Aregeraageaacriraaccriccagaaarracagargarragacaaaagagargraaar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAATGGAGCAGTCTTGAAGTGGTTAAAAAAAAAACAACCTTGTTGATATGGGCATCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGTCTCAAAAGGAACGTAGAGAAACTTCAAAAGCAAAAACAAAAGGGTAAAGAGAACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAAGGTTCTAAGGTCACTAAAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 6233 BF; 2290 A; 1095 C; 1157 G; 1691 T; 0 U; 0 Other;
                                                                                                                                                                                                             Claim 9; Page 17-22; 134pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 99.9°
Matches 1463; Conservative
```

07-NOV-2001 (first entry)

```
1105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1525
                                                                                                                                                                                                                                                       1080
                                                                                                                                                                                                                                                                                                                                                                                       1141 AGAGCAAAAACAAATAAAAAAGAAAGGGAGGGACCAAAGTTGGTTAAATTATTGACAGGA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACCCAGATCAAACAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTGCTGTATTG 1405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAATAAAGTTGATTTCAGA 1165
                                                                                                                                                                                                                                                                                                                                                                             1166 GCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAAAAATTC 1225
                                                                                                                                                                                                                                                                                                                                                                                                                    1226 AGAGCAAAAACAAATAAAAAGAAAAGAAGGAGCCAAAGTTGGTTAATTATTGACAGGA 1285
                                                         745
                                                                    865
                                                                                                                                                         780
                                                                                                                                                                             925
                                                                                                                                                                                               840
                                                                                                                                                                                                                   985
                                                                                                                                                                                                                                      900
                                      009
                   685
TGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGGATTTTAGT 540
                                                                                                                                      GACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGGAAGCCCTC
                                                                                                                                                                                         781 ATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCCAAGCA
                                                                                                                                                                                                                             841 AAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTAGTACTCTATCT
                                                                                                                                                                                                                                                                                                                                                 721 GACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGGAAGCCCTC
                                                                                                                                                                                                                   926 AAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTATCT
                                                                                                                                                                                                                                                                                               TTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAAATTCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAAACCTTCCAAGTGTATATGTAGAACAGAAAACCACACCAAATGAGACGATT
                                      541 CTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCAAAGCCTTC
                                                                                                                                                                             ATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCCAACAAGCA
                                                          ACAAATACAGCAACAGCCACAGAAGAGATGTCAAGATGAAATTTAGCAATGAGGTTTTC
                   CTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCAAAGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1261
                                                                                                                                                                                                                                                                                                                                      1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1526
                                                                                                                                                                                                                                                                                                1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1441
                                                                                                                                      908
                                                                                                                                                                            998
481
                   626
                                                          989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 6 8 6
                                                                                                                                                                                            g
                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                        8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                 8 8
                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 6
             ò
                                   Ωp
                                                         ઠે
                                                                       g
                                                                                               ठ
                                                                                                               g
                                                                                                                                 \delta
                                                                                                                                                       셤
                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                   Š
```

AAK77710 standard; DNA; 1045 BP.

AAK77710,

RESULT 15
AAK77710
ID AAK77
XX
AC AAK77

```
Human, immune; haematopoietic; immune/haematopoietic antigen; cancer; cytostatic; gene therapy; vaccine; metastasis; ds.
                     Human immune/haematopoietic antigen genomic sequence SEQ ID NO:32522
                                                                                                                                                                                                                                                                                                                                                                              26-JUL-2000; 2000US-0220964P.
14-AUG-2000; 2000US-0220964P.
14-AUG-2000; 2000US-0224519P.
14-AUG-2000; 2000US-0225213P.
14-AUG-2000; 2000US-0225214P.
14-AUG-2000; 2000US-0225264P.
14-AUG-2000; 2000US-0225264P.
14-AUG-2000; 2000US-0225264P.
14-AUG-2000; 2000US-0225264P.
14-AUG-2000; 2000US-0225264P.
14-AUG-2000; 2000US-0225264P.
14-AUG-2000; 2000US-0225264P.
14-AUG-2000; 2000US-022544P.
12-AUG-2000; 2000US-022549P.
12-AUG-2000; 2000US-022549P.
12-AUG-2000; 2000US-022549P.
13-AUG-2000; 2000US-022549P.
13-AUG-2000; 2000US-022928P.
10-SEP-2000; 2000US-0229344P.
10-SEP-2000; 2000US-0229344P.
10-SEP-2000; 2000US-0229344P.
10-SEP-2000; 2000US-0229344P.
10-SEP-2000; 2000US-0229344P.
10-SEP-2000; 2000US-0229344P.
10-SEP-2000; 2000US-0229344P.
10-SEP-2000; 2000US-0229344P.
10-SEP-2000; 2000US-0239345P.
10-SEP-2000; 2000US-0239343P.
10-SEP-2000; 2000US-0239343P.
10-SEP-2000; 2000US-0239343P.
10-SEP-2000; 2000US-0239343P.
10-SEP-2000; 2000US-0239343P.
10-SEP-2000; 2000US-0239343P.
10-SEP-2000; 2000US-0239343P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      200005-0231244P.
200005-0231413P.
200005-0231414P.
200005-0232080P.
200005-0232081P.
                                                                                                                                                                                                                                                                     2000US-0205515P.
2000US-0209467P.
2000US-0214886P.
                                                                                                                                                                                                                                                                                                          2000US-0215135P.
2000US-0216647P.
2000US-0216880P.
                                                                                                                                                                                                                                                                                                                                             2000US-0217487P.
2000US-0217496P.
2000US-0218290P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000US-0232400P
2000US-0232401P
2000US-0233063P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100US-0232397P
                                                                                                                                                           17-JAN-2001; 2001WO-US001354
                                                                                                          WO200157182-A2
                                                                                                                                                                                                                                16-MAR-2000; 2
17-MAR-2000; 2
18-APR-2000; 2
19-MAY-2000; 2
07-JUN-2000; 2
28-JUN-2000; 2
                                                                                                                                                                                                                                                                                                        30-JUN-2000;
07-JUL-2000;
07-JUL-2000;
11-JUL-2000;
11-JUL-2000;
14-JUL-2000;
                                                                                    Homo sapiens
                                                                                                                                   09-AUG-2001
```

```
14-SEP-2000; 2000US-0233064P.

14-SEP-2000; 2000US-0234523P.

21-SEP-2000; 2000US-0234524P.

21-SEP-2000; 2000US-023459P.

25-SEP-2000; 2000US-023499P.

26-SEP-2000; 2000US-0235834P.

27-SEP-2000; 2000US-0235834P.

27-SEP-2000; 2000US-0235834P.

29-SEP-2000; 2000US-0235834P.

29-SEP-2000; 2000US-023636P.

29-SEP-2000; 2000US-023636P.

29-SEP-2000; 2000US-023636P.

29-SEP-2000; 2000US-023636P.

29-SEP-2000; 2000US-023636P.

29-SEP-2000; 2000US-023638P.

20-CCT-2000; 2000US-0237038P.

02-CCT-2000; 2000US-0237038P.

02-CCT-2000; 2000US-0237038P.

02-CCT-2000; 2000US-0237038P.

02-CCT-2000; 2000US-0237038P.

02-CCT-2000; 2000US-0237038P.

02-CCT-2000; 2000US-0237038P.

20-CCT-2000; 2000US-0237038P.

20-CCT-2000; 2000US-0237038P.

20-CCT-2000; 2000US-0237038P.

20-CCT-2000; 2000US-0237038P.

20-CCT-2000; 2000US-0237038P.

20-CCT-2000; 2000US-0237038P.

20-CCT-2000; 2000US-0237038P.

20-CCT-2000; 2000US-0237038P.

20-CCT-2000; 2000US-0237038P.

20-CCT-2000; 2000US-0237038P.

20-CCT-2000; 2000US-0237038P.

20-CCT-2000; 2000US-0237038P.

20-CCT-2000; 2000US-0237038P.

20-CCT-2000; 2000US-0237038P.

20-CCT-2000; 2000US-0237038P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-NOV-2000; 20000S-0246525F.
06-NOV-2000; 20000S-0246525F.
08-NOV-2000; 20000S-024652F.
08-NOV-2000; 20000S-024652F.
08-NOV-2000; 20000S-0246528F.
08-NOV-2000; 20000S-0246612F.
08-NOV-2000; 20000S-0246613F.
08-NOV-2000; 20000S-0246613F.
17-NOV-2000; 20000S-024920F.
17-NOV-2000; 20000S-024920F.
17-NOV-2000; 20000S-024920F.
17-NOV-2000; 20000S-024920F.
17-NOV-2000; 20000S-024920F.
17-NOV-2000; 20000S-024920F.
17-NOV-2000; 20000S-024921F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-NOV-2000; 2
17-NOV-2000; 2
17-NOV-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-NOV-2000;
17-NOV-2000;
17-NOV-2000;
```

```
AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
activity, and can be used in gene therapy and vaccine production. (I)
proteins and polymucleotides may be used in the prevention, diagnosis and
treatment of diseases associated with inappropriate (I) expression. For
example, they may be used to treat disorders associated with decreased
expression by rectifying mutations or deletions in a patient's genome
that affect the activity of (I) by expressing inactive proteins or to
supplement the patients own production of (I). Additionally, (I) to
polymucleotides may be used to produce the secreted (I), by inserting the
nucleic acids into a host cell and culturing the cell to express the
protein (I) proteins and polymucleotides may be used to prevent,
diagnose and treat immune/haematopoietic-related diseases, especially
cancers and cancer metastases of haematopoietic-derived cells. AAK64703
concers and cancer human immune/haematopoietic-derived cells. AAK64703
concers from the present invention. AAK6492 to AAK5499 and AAM82169
represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAGCCATTGAA 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | IGEOGRAPICATITGATGAATICAGDAATCCATATCGTTACAGTTGGATTTTAGT 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                          Nucleic acids encoding human immune/hematopoietic antigen polypeptides, useful for preventing, diagnosing and/or treating cancers and metastasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCAAAGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        206 GTGAATGGAGCAGTCTTGAAGTGGTTAAAAAAAAAACATCTTGTTGATATGGGCCATCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GTGAATGGAGCAGTCTTGAAGTGGTTAAAAAAAAACATCTTGTTGATATGGGCATCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAAACAGCCATTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTAAAGACCAAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGTCTCAAAAGGAACGTAGAGAAACTTCAAAAGCAAAAACAAAAAGGTAAAAGAGAACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCACTAAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAAGGTTCTAAAGTTAAAAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   67.4%; Score 1043.4; DB 4; Length 1045; 99.9%; Pred. No. 2.6e-223; tive 0; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                 Disclosure; SEQ ID NO 32522; 3071pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1045 BP; 410 A; 187 C; 196 G; 252 T; 0 U; 0 Other;
08-DEC-2000; 2000US-0251869D.
08-DEC-2000; 2000US-0251989P.
08-DEC-2000; 2000US-0251990P.
11-DEC-2000; 2000US-0254097P.
05-JAN-2001; 2001US-0259678P.
                                                                                                                                            Barash SC, Ruben
                                                                                                           (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 99.9
Matches 1044; Conservative
                                                                                                                                                                              WPI; 2001-483426/52
                                                                                                                                              ковеп СА,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

ö

```
TICCAGATTAAAATGCAAAATTACAACAACAAATATGGGAACAAAGTAAAAATTCTCA 1105
                                                                                                                                          926 AAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTATCT 985
721 AAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTATCT 780
                                                                                                                                                                                                                            746 CGAITTGCITCAGCITGIAIGAAITCACGIACCAAIGGCACTAITCAITTTGGAGTCAAA 805
541 CGAITTGCITCAGCITGIAIGAAIICACGIACCAAIGGCACIAITCAITITGGAGTCAAA 600
                                                                    866 ATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCCAACAAGCA 925
                                                                                                                  540
ACAAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAATTTAGCAATGAGGTTTTC 745
           1021 AGAGCAAAACAAATAAAAAAGAAA 1045
                                                                                                                                                                                                                                                                                                                            1226 AGAGCAAAACAAATAAAAAGAAA 1250
                                                                                                                                                                                                                    1046
  989
                                                                                                                            199
                                                                                                      & g &
.
                                                                                                                                                          8 6 8
                                                                                                                                                                                                               ል ප છ
                                                                                                                                                                                                                                                                   g &
                                                                                    g
                                   ò
                                                                        à
```

Search completed: April 25, 2004, 08:46:12 Job time: 417.576 secs

```
April 24, 2004, 23:54:27; Search time 4078.84 Seconds (without alignments) 16460.143 Million cell updates/sec
                                                                                                                                                    US-10-051-835-17
1549
1 aacacatcagatattttcag......ctctaaatctttaccatcaa 1549
                                                                                                                                                                                                                                                                                                6940544
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                 3470272 seqs, 21671516995 residues
                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                            OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                    IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            em_htgo_hum:*
em_htgo_mus:*
em_htgo_other:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 em_htg_hum:*
em_htg_inv:*
em_htg_other:*
em_htg_pln:*
em_htg_pln:*
em_htg_rod:*
em_htg_rod:*
em_htg_rot:*
em_btg_vrt:*
                                                                                                                                                                                                                                                                                                                              Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                        gp htg: *
gp htg: *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
gp n i *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          em or: *
em ov: *
em pat:
em ph: *
em pl: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        em ats:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     em un:
                                                                                                                                                                                                                                                                                                                                                                                                                                           GenEmbl:*
                                                                                                                                                       Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                           Database :
                                                                                                                                                                                                                                                                 Searched:
                                                                                             Run on:
```

Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

lettyed by amaryote of the court score arecraes	
1	SUMMARIES
1	SUM
5	
aliat Your	
7	
TO A T TO	

Description	AK122951 Homo	HSM808722 BX647072	AB095925 Homo	AC000119 AC000119 Homo	AC092871 Pan t	AR338630 Seque	AX098228 Sequen	AC092513 AC092513 Fap1	ACLOSASS ACLOSASS ACLOSASS SES S	AC079885 Ratt	AC084240 Rattus	AC134055 Rattue	AC108900	AC113236 AC113236 Canis	AK383208 AK38323208 AK38323208	AX098226 AX098226	AC110666 AC110666	AC022453 AC022453	AC084271	AC129122	AC104854 AC104854	BX005331	AX245250 AX245250	BX548026 BX548026	AL953865 AL953865	AX246569 AX246569 AX246569 AX246569	AJ592058 AJ592058	AL929509 AL929509	166494 bequeince	BX537350 BX537350 Da	PFA929351 AL929351	AC023466 AC0	BX470139 Danio r	AX344567 Sequenc	AX346860 AX346860 Sequence	ощо ва	ALIGNMENTS		39788.	30206	.co.ro (full insert sequence). n)	Chordata, Craniata, Vertebrata, Euteleostomi,	Filmaces; catallinin; nominicae.	Yuuki, H., Hara, H., Suqiyama, T., Irie
Length DB	25.5	926	827	91191	371	771	6233	76350	15424	48278	80665	21557	9	25885	υ C	5870	7638	5282	5965		2652	8729	356	4.	57603	-	4	27	218	88355	020	400	477	49980	14006	143585			Æ	245	fis	zoa	Duciletia; Takabashi	Musashino.
ery	100				94.	94.	94.	96	67.		מו	50.0	20	0, 0		40.	38.	2 6	30.	30.	20.	10.	œ' v		ø.	4,4	. 4	4,	4.	. 4	4,	4. <	4	4	m r	n w		1	(122951 omo sapie	AK122951	igo capi	Homo sapiens Eukaryota, Meta	inimaria;	Arita M
8		1472.4	47.2	14		462	462	to a	9 4 6 6 6	ה ס	921	, or	788.4	759	636.B	628.4	599.6	4,4	73,	473.8	4.4	169.2	138	95.2	95.2			69.4		2 C	ė	ن ن	93	61.6	Φ,	60.0			×	ON		Σ		
Result No.		7 6	4 (*		טט		7						c 14		17	18		0 F		53	2.5	56		0 6 7 7 0 0				34								0 0 4 4 7 0		RESULT 1 AK122951	LOCUS DEFINITION	ACCESSION	VERSION KEYWORDS SOURCE	ORGANI	REFERENCE	,

COMMENT

```
1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HSM808722 6826 bp mRNA linear PRI 30-AUG-2003 Homo sapiens mRNA; cDNA DKFZp686B0866 (from clone DKFZp686B0866). BX647072
                                                                                                                                                                                                                                                                                                                                                                                                       1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1222
                                                                                                                                                                                                                                                                                                                                              960
                                                                                                                                                                                                                                                                                                                                                                         982
                                                  9
                                                                                                        720
                                                                                                                                                                    780
                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                               922
                     623
                                                                              683
                                                                                                                                      742
                                                                                                                                                                                              802
                                                                                                                                                                                                                                                        862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TACGAAAAATAAAGTTGATTTCAGAGCATTTTAAAGCAGATTTTAAAACACTGGCAGAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TACGAAAATAAAGTTGATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATCGTTACAAGTTCGATTTTAGTCTACAGCCTGAAACAGGGACCAGGCAATCTCATTGA
                                                                                                                                                                 TGAAGACCATCAAGTCCAACAAGAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                     TTACTGCCAAATAGTACTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTICCICIGAATGCCAATATGATTACTTCCAGATTAAAATGCAAAATTACAACAACAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGGAACAAAGTAAAAATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGTTGGTTAAATTATTGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAAATTAAATGGTTTGCTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAAAGCTTACAAAGAAAGCGAGTAGCAAACCTTCCATTTCCAAGTGTATATGTAGAACA
    TCCGATACATGAATTCAAAGCCTTCACAAATACAGCAACAGCCACAGAAGAGGATGTCAA
                                                                                                                                                                                                                                                                                   CACCAATGATACCAAGGAAGCCCTCATTAACCATTTCAATCTGATGATAACAAGTATTT
                                                                                                                                                                                                                                                                                                      TGAAGACCATCAAGTCCAACAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                       TITACIGCCAAAIAGIACICIAICIGACAGAITIGITATIGAAGIGGACAITATICCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         T-CGATACATGAATTCAAAGCCTTCACAAATACAGCAACAGCACAGAAGAAGAGGATGTCAA
                                                                                                                                                                                                                                            TGGCACTATTCATTTTGGAGTCAAAGACACAAGGGAAAATTGTTGGCATCAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>AAAGTTGGTTAAATTATTGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACA</u>
                                                                                                                                                                                                                            TGGCACTATTCATTTTGGAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1463
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1523
                         564
                                                                               624
                                                                                                                                         684
                                                                                                                                                                                                  743
                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                        803
                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                  863
                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                           923
                                                                                                                                                                                                                                                                                                                                                                                                                                    983
                                                     601
                                                                                                           661
                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                       196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 2
HSM808722
LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                   ద
                                                                                                                                                                                           셤
                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                             장 염
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठ व ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                          8 6
                                                                                                    ठे
                                                                                                                                                                     ò
                                                                                                     Direct Submissions

S Isogai, T. and Yamamoto, J.

Direct Submission

List Submission

Direct Submission

Submitted (15-JUL-2003) Takao Isogai, FLJ Project (HRI Team); 2-6-7

Kazusa-Kamatari, Kisarazu, Chiba 292-0818, Japan

(E-malligenomics@hri.or.jp, Telis 181-438-52-3975, Fax:81-438-52-3986)

NEDO human CDNA sequencing project supported by Ministry of Economy, Trade and Industry of Japan; CDNA hinstry of Economy, Trade and Industry of Japan; CDNA full insert sequencing: Research Association for Biotechnology (RAB); CDNA library construction: Helix Research Institute (HRI) (supported by Japan Key Technology Center etc.); 5- & 3-end one pass sequencing: RAB, HRI, and Biotechnology Center, National Institute of Technology and Evaluation; clone selection for full insert sequencing: HRI and RAB; annotation: HRI and RAB.

RAB; annotation: HRI and RAB.
Isono, Y., Kawai-Hio, Y., Saito, K., Nishikawa, T., Kimura, K., Yamashita, H., Matsuo, K., Nakamura, Y., Sekine, M., Kikuchi, H., Kanda, K., Wagatsuma, M., Murakawa, K., Kanehori, K., Sugiyama, A., and Isona, B., Suzuki, Y., Sugano, S., Nagahari, K., Masuho, Y., Nagai, K. NEDO human cDNA sequencing project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGGCAACCATCCATAGACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCC 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGATTGGACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTTGCAAGACTACTGGGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 144 TGATTGGACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241 ACATCTTGTTGATATGGGCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGAATTGCGGAAAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAATTGCGGAAAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAAAAATGCTCCTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAAAACTTCAAAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u> AAAACAAAAGGGTAAAGAGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGC</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAAAGGTTCTAAGTCACTAAAAGTTGAGCTCATAGAAGATAAAATAGATTATACAAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAAAGGTTCTAAGTCACTAAAAGTTGAGCTCATAGAAGATAAAATAGATTATACAAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 AACACATCAGATATTTTCAGCACTAAAAGAGATGGTTTTCCCCCACATATATGTAAAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAAAAATGCTCCTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
99.0%; Score 1533.8; DB 9; Length 3956;
Best Local Similarity 99.8%; Pred. No. 1.2e-279;
Matches 1546; Conservative 0; Mismatches 2; Indels 1;
                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="mkNA"

db zref="earon:9606"
/clone="THYMU2039788"
/clasue_type="thymus"
/clone lib="THYMU2"
/note="cloning vector: pME18SFL3"
                                                                                                                                                                                                                                                                                                                                1: 3956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  444
                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                    FEATURES
```

DRIGIN

g

à

ò 중 음 g

ð

8 8 8

B Q

ģ

5 8 5

셤

OY 548 CCATCCATAGACTGACATGTGTATCATTGATGATTCAGTAATCCATATCGT 607	8 48 8 9 2 9 8 48		, Db 1109 CCAAATAGTACTCTATCTGACAGATTTGTTGAGGGGCATTATTCCACAGTTCTT 1168 Qy 1028 GAATGCCAATATGATTACTTCCAGATTAAAATGCAAAATTACAACAAAAATGGGAA 1087 Db 1169 GAATGCCAATATGATTACTTCCAGATTAAAATGCAAAATTACAACAAAAATATGGGAA 1228 Qy 1088 CAAAGTAAAAAATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACAA 1147	1148 AATAAAGTTGATTTCAGAGCATTTAAAGCAGATTTTAAAACGCGCAGAGTTCCAGAAAA 11289 AATHAAAGTTGATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAA 1289 GAAGAGAAAAAATTCAGAGCATTTAAAACAAAAAAAAAA		OY 1388 AAATGGTTTGCTGTATTGGAGTTTGATCCTGAGTCTAACATCGAGTGGTCCAAAGCT 1447	QY 1508 ACACCAAATGAGACGATTTCTACTTTACCATCAA 1549
VERSION KEYWORDS SOURCE Homo sapiens (human) ORGANISM Homo sapiens CRANISM Homo sapiens CRANISM Homo sapiens CRANISM Homo sapiens CRANISM Homo sapiens CRANISM Homo sapiens CRANISM EUkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo. REFERENCE 1 (Dases 1 to 6826) AUTHORS Blocker, H., Boccher, M., Mewes, H.W.; Weil, B., Amid, C., Osanger, A., Fobo, G., Han, M., and Wiemann, S. CONSRIM The German Human cDNA Consortium TITLE Direct Submission JUTLE Direct Submission	Neuherberg, GERMANY COMMENT Clone from S. Wiemann, Molecular Genome Analysis, German Cancer Clone from S. Wiemann, Molecular Genome Analysis, German Cancer Research Center (DKEZ); Email s.wiemann@dkfz-heidelberg.de; Sequenced by GBF (National Research Centre for Biotechnology Ltd., Braunschweig/Germany) within the CDNA sequencing consortium of the German Genome Project. This clone (DKEZp68680866) is available at the RZDD in Berlin. Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 14059 Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de Puther information about the clone and the sequencing project is available	- -	/clone_lib="686 (synonym: hlcc3). Vector F Vector F	Matches 1476; Conservative 0; Mismatches 6; Indels 0; Gaps 0; Qy 68 AGATACGGTATCAGAAAGCAACTTAACCTTCAGAAATACAGATGG 127 Db 209 AGTCAGTTTGGTATGGCAAAGCAACTTAACCTTCAGAAAATACAGATGG 268 Qy 128 ACAAAAGAGATTTAGTTTAAATCATTAACTTTAACTTTCAGAAAATACAGATTGG 268 Qy 128 ACAAAAGAGAATTTAAATCAGTTAGAAAGTTAAAAATAGACAAAAAAAA	Db 269 ACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGAAA 328	309 GGGAAAACAGCCATTGAAGATTCGATTCAAATAGATGGGAAAGCCCAGTAAAAAT 308 CGGAAAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAAT 449 CGGAAAACAGCCATTGAAGATTCGATTCAGACATCAAGATGGGAAAGCCCAGTAAAAAT 368 GCTCCTAAAAGCCCAAATGTCTCAAAAGGAACGTAGAAGAAAAT 368 GCTCCTAAAAGCACAACTGTGTCTCAAAAGGAACGTAGAAAACAAAAATAAAAAAAA	AAAGGT 48 AAAGGT 62 AGGCAA 54 AGGCAA 68

```
ૃદ્ધે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 원
                                                                                                                                                                               g
                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                     월.. 장
                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                  8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ₹
                                 ð
                                                             셤
                                                                                       ò
                                                                                                                    g
                                                                                                                                                      δ
                                                                                                                                                                                                                                                                         ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /translation="SQFGIRMAKQLNLPENTDDWTKEDVNQWLESHKIDQKHREILTE
QDVNGAVLKWLKKEHJVDMGITHGPALQIEELFKELRKTAIEDSIGYSWGKPSKNAP
COCYGQKERRETSKQKQKKENDPDMAPSAMSTTAKGSKELKVELIEDKIDYTKERQ
PSIDLTCVSYPFDERSNPYRYLDFSLQPETGPGNLIDPIHERKAFTWTATATATEDVK
MKFSNBVFRPASACMNSRTNGTIHFGVKDKPHGKIVGIKVTNDTKEALINFFNLMINK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SKFLODMHTLLLTRHRDEHEGETGNWFSPFIEALHKDEGNEAVEAVLLESIHRENPNA
FICQALARHFYIKKKDFGNALNWAKQAKIIEPDNSYISDTLGQVYKSKIRWIEENGG
NGNISVDDLIALLDLAEHASSAFKESQQQSEDREYEVKERLYPKSKRRYDTYNIAGYQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GE IEVGLYTI OI LOLI PFPDNKNELSKRYMVNFVSGSSDI PODPNNEYKLALKNY I PY
LTKLKFSLKKS FDFFDEYFVLLKPRNN I KONEEAKTRRKVAGY FKKYVDI FCLLEESO
NNTGLGSKFSEPLQVERCRRNLVALKADKFSGLLEYLI KSQEDAI STMKCI VNEYTFL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LEQCTVKIOSKEKLNFILANIILSCIOPTSRLVKPVEKLKDOLREVLOPIGLTYQFSE
PYELASLIJEWPENQOLODRSEGWKEYAPALKONSFROQYKHWFYKOPIAYFFLOKGKR
LEBLUHKOKI DOKKTYPDINSLWOGSDVWKEKVOBLLLRLGRAENNCLYIEYGIN
EKITIPITPAFLGOLRSGRSIEKVSPYLGFSIGGPLAYDIEIV"
                                                                                                                                                                                                  Nagase, T., Kikuno, R. and Ohara, O.
Direct Submission
Submitted (08-WOV-2002) Osamu Ohara, Kazusa DNA Research Institute,
Department of Human Gene Research, 2-6-7 Kazusa-kamatari, Kisaraxu,
Chiba 292-0818, Japan (E-mail:cdnainfo@Kazusa.or.jp,
URL:http://www.kazusa.or.jp/huge, Tel:81-438-52-3913,
Fax:81-438-52-3914)
                                                                                            Euteleostomi;
                                                                                                                               Nagase,T., Kikuno,R. and Ohara,O.
The nucleotide sequence of a long cDNA clone isolated from human
Published Only in Database (2002)
2 (bases 1 to 6827)
                                                                                                                                                                                                                                                                                                                                                                                                  /cell type="normal human aortic endothelial cells"
/note="vector:pBC SK plus"
                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Eutele
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
   Homo sapiens mRNA for KIAA2004 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /codon_start=1
/evidence=not_experimental
/product="KIAA2004 protein"
/protein_id="BAC3101.1"
/db_xref="GI:24891174"
                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="eg01144"
                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                     /gene="KIAA2004"
<231. .5018
/gene="KIAA2004"
                                 GI:24899173
                                                             Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                .6827
                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .6827
                  AB095925
AB095925.1
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
CRGANISM
                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                          gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDS
                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
```

```
Ouery Match
95.1%; Score 1472.4; DB 9; Length 6827;
Best Local Similarity 99.6%; Pred. No. 4.2e-268;
Matches 1476; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

68 AGACTACTGGGTATCAGAATGGCAAACTAACTTCCAGAAAATACAGATGG 127
```

ઠ

g

à

1130 1250 1207 1010 1070 1027 1190 1087 1147 967 247 410 470 590 487 650 547 710 607 770 667 830 727 890 787 950 847 907 307 367 427 231 AGTCAGITIGGIATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGG 290 TCTAAGTCACTAAAAGTTGAGCTCATAGAAGATAAAAATAGATTACAAAGGAAAGGCAA CATGAATTCAAAGCCTTCACAAATACAGCCAACAGCCACAGAAGAAGGATGTCAAGATGAAA 951 ATTCATTTTGGAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAAT 1071 CATCAAGTCCAACAAGCAAAAAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTG ACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAAACACAGGGAA CGGAAAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAT GCTCCTAAAGACCCAAACTGTGTCTCAAAAGGAACGTAGAAAACTTCAAAAGCAAAAACAA CCATCCATAGACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGT 771 TACAAGTTGGATTTTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATA CATGAATTCAAAGCCTTCACAAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAA TITAGCAATGAGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACT CATCAAGTCCAACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTG 1131 CCAAATAGTACTCTATCTGACAGATTGTTATTGAAGTGGACATTATTCCACAGTTCTCT 1191 GAATGCCAATATGATTATTTCCAGATTAAAATGCAAAATTACAACAACAAATATGGGAA CAAAGTAAAAATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAA 1148 AATAAAGTTGATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAA GTTGATATGGGCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTG 591 AAGGGTAAAGAGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGT TCTAAGTCACTAAAAGTTGAGCTCATAGAAGATAAAATAGATTATACAAAGGAAAGGCAA CCATCCATAGACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGT TACAAGTIGGAITITIAGICTACAGCCIGAAACAGGACCAGGCAATCTCATIGATCCGATA 788 ATTCATTTTGGAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAAT GATACCAAGGAAGCCCTCATTAACCATTTCAATCTGATGATAAAAAAAGTATTTTGAAGAC **CCAAATAGTACTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCT** GAATGCCAATATGATTACTTCCAGATTAAAATGCAAAATTACAACAAAATATGGGAA ACAAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAA CGGAAAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAAAT AAGGGTAAAGAGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAAGGT 488 728 848 968 1028 1088 1311 188 531 428 651 548 711 608 899 831 128 291 351 248 308 471 368 908

us-10-051-835-17.rge

ď

δ

g

ઠે

d 8 g g ઠે 셤

à

```
MAPPING INFORMATION:
The sequence of this clone was established as part of a mapping and sequencing collaboration between the NHGRI Chromosome 7 Mapping project and the Washington University Genome Sequencing Center: For additional information about the map position of this sequence, see http://www.nhgri.nih.gov/DIR/GTB/CHR7 or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The actual start of this clone is at base position 1 of CTB-10414 actual end is at 191191 of CTB-10414. The orientation of this clone
                                                                                                                                                                                                                                                                                                  Clone CTB-10414 is: from the first release of the human BAC library CIDB-9785K-B. The library contains cloned DNA from the male fibroblast call line 9788K. See: Shizuya et al., Proc. Natl. Acad. Sci. USA 89:8794-7 (1992); U-J. Kim et al., Genomics 34:213-8 (1996). This clone is available from Research Genetics, Inc. (http://www.resgen.com).
Spelosball. Selection: chloramphenicol
30); an attempt was made to resolve all sequencing problems, such as compressions and repeats; all regions were covered by sequence from more than one subclone; and the assembly was confirmed by restriction digest.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone="CTB-10414"
/clone=lib="CITB-9785K-B"
1655.71726
/rpt_family="AcHobo"
1752.1870
/rpt_family="Alu"
1872.1960
/rpt_family="AcHobo"
/rpt_family="AcHobo"
/rpt_family="AcHobo"
/rpt_family="AcHobo"
/rpt_family="AcHobo"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .191191
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/chromosome="7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /rpc_family="MaLR"
7812_.7895
7912_amily="MER1_type"
7931_.9288
/rpc_family="Li"
11003_.11945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NEIGHBORING SEQUENCE INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /rpt_family="MIR"
[6169. .16205
/rpt_family="AT_rich"
[6229. .1626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  family="AT_rich"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /rpt_family="L2"
16509. 16797
/rpt_family="Alu"
16798. 16870
/rpt_family="R1"
16901. 17789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rpt family="ERV1"
2538. .12710
                                                                                                                                                                                                                                                       mailto:egreen@nhgri.níh.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /rpt_family="MIR"
4993. .15226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /rpt_family="MIR"
5010. .6439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /rpt_family="MIR"
(3031. .13142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       i. .15226
_family="MIR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /rpt_family="L2"
[3982. .1400c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rpt_family="A
6354. .16452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6439
                                                                                                                                                                                                                                                                                               SOURCE INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /map="7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        is unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Direct Submission
Submitted (15-077-2003) Department of Genetics, Washington
Miversity, 4444 Forest Park Avenue, St. Louis, Missouri 63108, USA
                                                                       1430
                                                                                                                                                             1490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AC000119 191191 bp DNA linear PRI 15-OCT-2003
Homo sapiens BAC clone CTB-10414 from 7, complete sequence.
                                                                                                                    1268 GTTAAATTATTGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATT 1327
                                                                                                                                                                                                          1328 CTTGTAACAAATAAATGCCACCCAGATCAAACAAAACACTTAGATTTCCTGAAGGAAATT 1387
                                                                                                                                                                                                                                                       1491 CTTGTAACAAATAAATGCCACCCAGATCAAACAAAACACTTAGATTTCCTGAAGGAAATT 1550
                                                                                                                                                                                                                                                                                               AAATGGTTTTGCTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGGTCAAAGCT 1447
                                                                                                                                                                                                                                                                                                                                          1551 AAATGGTTTGCTGTATTGGAGTTTGATCCTGAGTCTAACATCGAGTGGGTCAAAGCT 1610
                                                                                                                                                                                                                                                                                                                                                                                       1448 TACAAAGAAAGCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAAAC 1507
                                                                                                                                                                                                                                                                                                                                                                                                                  NOTICE: This sequence may not represent the entire insert of this clone. It may be shorter because we only sequence overlapping clone sections once, or longer because we provide a small overlap between neighboring data submissions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This sequence was finished as follows unless otherwise noted: all regions were double stranded, sequenced with an alternate chemistry, or covered by high quality data (i.e., phred quality >=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

1. (bases 1 to 191191)
Sulston,J.B. and Wilson,R.
Toward a complete human genome sequence
Genome Res. 8 (11), 1097-1108 (1998)
                                                         Center: Washington University Genome Sequencing Center
Center code: WUGSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1508 ACACCAAATGAGACGATTTCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1671 ACACCAAATGAGACGATTTCTACTCTAAATCTTTACCATCAA 1712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The sequence of Homo sapiens BAC clone CTB-10414 Unpublished (2001) 3 (bases 1 to 191191)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Web site: http://genome.wustl.edu
Contact: sapiens@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Center project name: H_RG104I04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 (bases 1 to 191191)
Gibson, A. and Wamsley, P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mitted (31-JAN-1997)
(bases 1 to 191191)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AC000119.1 GI:1809226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Waterston, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9063792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AC000119
                                                                                                                                                                                                                                                                                                  1388
                                                                                                                                                                                                                                                                                                                                                                                                                                     1611
                                                                       1371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 4
AC000119/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PUBMED
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
```

ô

```
93621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93920 TGAATTCAAAGCCTTCACAAATACAGCAAAACAGCCACAGAAGAGGAGGATGTCAAGATGAAAATT 93861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   93741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             250 TGATATGGGCATCACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCG 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                549
                                                                                                                                                                                                                                                                                                                                                      129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94160 GGGTAAAGAGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          910 TCAAGTCCAACAAGCAAAGAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93680 TCAAGTCCAACAAGGAAAAAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93860 TAGCAATGAGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCATTTTGGAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAGTTGGATTTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          730 TAGCAATGAGGTTTTCCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    850 TACCAAGGAAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCA
                                                                                                                                                                                                                                                                                                                                                                                         310 GAAAACAGCCATTGAAGATTCGATTCAGACATCTAACATGGGGAAAGCCCAGTAAAAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAAAACTTCAAAAGCAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          430 GGGTAAAGAGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAAGTCACTAAAAGTTGAGCTCATAGAAGATAAAATAGATTATACAAAGGAAAGGCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCCATAGACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCATATGGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       670 TGAATTCAAAGCCTTCACAAATACAGCAACAGCCACAGAAGAGCATGTCAAAGATGAAATT
                                                                                                                                                                                                                                                                                                                                                      70 ACTACTGGGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                        130 AAAAGAGGAIGIAAAICAGIGGIIAGAAAGICAIAAGAITGACCAAAAACACAGGAAAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                   Length 191191;
                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                   Query Match 95.0%; Score 1472; DB 9; Best Local Similarity 99.7%; Pred. No. 2.5e-268; Matches 1475; Conservative 0; Mismatches 5;
42149 . .42293
/rpt_family="GA-rich"
42425 . .42532
/rpt_family="CR1"
4269 . .42699
/rpt_family="AT_rich"
42751 . .42399
/rpt_family="MR"
42751 . .43272
                                                                                                                                                                                                       repeat_region
     repeat_region
                                                      repeat_region
                                                                                                       repeat_region
                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5 6 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  / 1918_1. _ 2014_1. _ 2014_1. _ 2014_1. _ 2016_1. _ 2016_1. _ 2016_1. _ 2016_1. _ 2016_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018_1. _ 3018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          34694. .34782
/rpt_family="MIR"
/rpt_family="L1"
/rpt_family="L1"
3645. .37229
3726. .37229
/rpt_family="L1"
37236. .38427
/rpt_family="L1"
38428. .38699
/rpt_family="L1"
38428. .38699
/rpt_family="L1"
3976. .39084
/rpt_family="L1"
39085. .39660
/rpt_family="L1"
39363. .39660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             family="MER1_type"
                                                                                                  / Trpt family=" (TCTG) n" | 19807. 20662 | 19807. 20662 | 24317. 24420 | 7100 family=" Alu" | 24317. 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 26199 | 2
                                                                                                                                                                                                                                                                                                                                                                                                               20845. 27684
/rpt_family="T2_type"
27689. 29178
/rpt_family="ERV1"
/rpt_family="ERV1"
             / uv2. .18188
/rpt_family="ERVL"
/ s1899. .1870.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /rpt_family="L1"
41007 . 41120
41135 . 41130
41355 . 4130
7. Tpt_family="L1"
41365 . 42126
/rpt_family="Alu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           39601. .39885
/rpt_family="L1"
39886. .40005
/rpt_family="L1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /ipt_family="MER1_
40344. 40364
-/rpt_family="L"
4038]. 40537
-/rpt_family="L"
4056. 4057
-/rpt_family="L"
4056. 4057
     rpt_family="L1"
7802. .18188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                   repeat_region
                                                                                    repeat_region
                                                                                                                                      repeat_region
                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
```

g ઠે 유 ઠે 셤 δ ď ò ď ò 셤 ò 임

g ö

ò

8 6

셤

```
* NOTE: This is a 'working draft' sequence. It currently consists of 3 contigs. Gaps between the contigs are represented as runs of N. The order of the pieces is believed to be correct as given, however the sizes of the gaps between them are based on estimates that have provided by the submittor.

This sequence will be replaced

* This sequence will be preserved.

* The accession number will be preserved.

* 77641 17740; gap of unknown length

* 77741 77740; gap of unknown length

* 102027 102126; gap of unknown length

* 102127 17331: contig of 70405 bp in length.

Ilocation/Qualifiers
Green, B.D.

Direct Submission
Submitted (12-JUN-2002) NIH Intramural Sequencing Center, 8717
Submitted (12-JUN-2002) NIH Intramural Sequencing Center, 8717
Grovemont Circle, 3dathersburg, MD 20877, USA
On Jun 12, 2002 this sequence version replaced gi:15055304.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="clone overlaps with GenBank Accession Number AC098646 clone RP43-44G6 (center project name anj)" 77741. .102026
                                                                                                                                Center: NIH Intranural Sequencing Center Center code: NISC
Web site: http://www.nisc.nih.gov
Contact: nisc_zoo@nhgri.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. 172371
| organism="Pan troglodytes"
| mol_type="genomic DNA"
| db xref="taxon:958"
| clone="RP43-120E8"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone lib="RP43"
1. :77640
/note="assembly_fragment clone end:SP6
vector side:left"
1. :33202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="assembly_fragment"
102127. .172371
/note="assembly_fragment
clone_end:T7
                                                                                                                                                                                                                                                     Center project name: ank
Center clone name: 120E08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
       AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 33200 Arcerrarecrerarrecaerrrearccreaercraacarcaarecaerccaaacrra 93141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Akhter, N., Antonellis, A., Ayele, K., Beckstrom-Sternberg, S.W.,
Benjamin, B., Blakesley, R.W., Bouffard, G.G., Breen, K., Brinkley, C.,
Brooks, S., Dietrich, N.L., Granite, S., Guan, X., Gupta, J.,
Brooks, S., Dietrich, N.L., Ho, S.-L., Idol, J.R., Karlins, E.,
Laric, P., Hamsen, N., Ho, S.-L., Idol, J.R., Karlins, E., Laric, P.,
Margulies, B.H., Massiello, C., Maskerii, B., Mastrian, S.D.,
McCloskey, J.C., McDowell, J., Paguirigan, C., Pearson, R.,
Portnoy, M.E., Prasad, A., Schueler, M.G., Stantripop, S., Thomas, J.W.,
Thomas, P.J., Touchman, J.W., Tsurgeon, C., Vogt, J.L., Walker, M.A.,
Welherby, K.D., Wiggins, L., Young, A., Zhang, L.-H. and Green, E.D.
                                                                                                                                                                  93501
                                                                                                                                                                                                                                                          93441
                                                                                                                                                                                                                                                                                                                                                  93440 TAAAĞTTGATTTCAĞAĞCATTTAAAĞCAĞATTTTAAAACTGCTĞGTĞĞTĞĞTĞATAAĞC 93381
                                                                                                                                                                                                                                                                                                                                                                                                                                            1149
                                                                                                                                                                                                                                                                                                                                                                                                1269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AC092871 172371 bp DNA linear HTG 12-JUN-2002 Pan troglodytes clone RP43-120E8, WORKING DRAFT SEQUENCE, 3 ordered pieces.
                                                                                                                       1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAAATTATTGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCT 1329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1330 TGTAACAAATAAATGCCACCCAGATCAAACAAAACACTTAGATTTCCTGAAGGAAATTAA 1389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1390 ATGGTTTGCTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGGTCAAAGCTTA 1449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1450 CAAAGAAAGCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAAACCAC 1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Merazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.
1 (bases 1 to 172371)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Direct Submission
Submitted (01-AUG-2001) NIH Intramural Sequencing Center, 8717
Grovemont Circle, Gaithersburg, MD 20877, USA
                                                                    93620 AAATAGTACTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGA
                                                                                                                                                                                                                                         1030 ATGCCAATATGATTACTTCCAGATTAAAATGCAAAATTACAAÇAACAAAATATGGGGAACA
                                                                                                                                                                  93560 Argccaarargarrarriccagarraaaargcaaaarracaacaacaaaarardggaaca
                                                                                                                                                                                                                 1090 AAGTAAAAATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAA
                                                                                                                                                                                                                                                                                                        1150 TAAAGTTGATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                970 AAATAGTACTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93080 ACCAAATGAGACGATTTCTACTCTAAATCTTTACCATCAA 93041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1510 ACCAMATGAGACGATTTCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AC092871.
AC092871.2 GI:21392483
HTG; HTGS_PHASE2; HTGS_DRAFT.
Pan troglodytes (chimpanzee)
Pan troglodytes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (bases 1 to 172371)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 172371)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Green, E.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
AC092871/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
```

116603

1269

116543

g

ò

g

ઠે g ò

ò

g

ठ

g ઠે a a

```
116422 CAAAGAAAGCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAAACCAC 116363
116842 ATGCCAATATGATTATTTCCAGATTAAAATGCAAAATTACAACAACAACAAAAACATGGGAACA 116783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACTGAACAAGAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGGACCAGCTATTCAAATAGAACAACTATTCAAAGAATTGCGGAAAAACAGCCATTGAA 325
                                                                                                                                                                                                                                                                                                                      CAAAGAAAGCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAAACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 ATGGCAAAGCAACTTAACCTTCCAGAAATACAGATGATTGGACAAAAGAAGAAGTAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTTGACTGAACAAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAATGGAGCAGTCTTGAAGTGGTTAAAAAAAAAACATCTTGTTGATATGGGCATCACA
                                                                                                                  ATGGTTTGCTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGGTCAAAGCTTA
                                                                                                                                                                AGCAGAAGAAAATTCAGAGCAAAAACAAATAAAAAAGAAAAGAGGACCAAAGTTGGT
                                                                                                                                                                                                                                                  TGTAACAAATAAATGCCACCCAGATCAAACAAAACACTTAGATTTCCTGAAGGAAATTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           86 ATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGAGGATGTAAAT
                                                                TAAAGTTGATTTCAGAGCATTTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGC
                                                                                                                                                                                         AGCAGAAGAAAAATTCAGAGCAAAACAAATAAAAAAGAAGAAGAGAGACCAAAGTTGGT
                                                                                                                                                                                                                                TAAATTATTGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 4771;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    116362 Accabardadddarrircracrcraarcriraccarda 116323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1462.4; DB 6;
Pred. No. 3.5e-266;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4771 bp DNA
Sequence 121 from patent US 6569662.
AR338630.
AR338630.1 GI:33725487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tang, Y.T., Zhou, P. and Drmanac, R.T.
Nucleic acids and polypeptides
Patent: US 656962-A 121 27-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .4771
/organism="unknown"
/wol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 99.9%;
Matches 1463; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                    1270
                                                                                                                                                                                                                                                                                                                                                                      1390
                                                                                                                                                                                                                                                                                                                                                                                                                                        1450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 997
                                                                                                   1150
                                                                                                                                                                    1210
                                                                                                                                                                                                                                                                                                      1330
                                     1090
                                                                                                                                                                                                                                                                                                                                                                                                       116482
                                                                   116782
                                                                                                                                                                                                    116662
                                                                                                                                                                                                                                                                    116602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 6
AR338630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                     8.685
                                                                                                                                                         à
                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAATAGTACTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGA 116843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAAGTCACTAAAAGTTGAGCTCATAGAAGATAAATAGATTATACAAAGGAAAGGCAACT 117323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              117143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                117083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                116963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 116903
                                                                                                                                                                                                                                                                                    117623
                                                                                                                                                                                                                                                                                                                                                      rgarargescarcacacargeaccascrarrcaarrasaagaacrarrcaaasaarrescs
                                                                                                                                                                                                                                                                                                                                                                                                               GGGTAAAGAGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTC 117383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            117262 CAAGTTGGATTTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACA 117203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rcarrirgascrcaascacaasccccarggaaarrcrrgccarcaascrcacaarga 117023
                                                                                                                                                    ACATATAGGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAATACAGATGATTGGAC 117743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAATAGTACTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGA 1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  696
                                                                                     ö
                                                                                                                                                                                                                                                      249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  849
                                                                                                                                                                                                                                                                                                                                                                                          369
                                                                                                                                                                                                                                                                                                                                                                                                                                                          429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAAGTCACTAAAAGTTGAGCTCATAGAAGATAAAATAGATTATACAAAGGAAAGGCAACC 549
                                                                                                                                                                                      189
                                                                                                                                                                                                                                                                                                                          309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         117142 TAGCAATGAGGTTTTCCGATTTGCTTCAGGTTTGAATTCACGTACCAATGGCACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atgccaatatgattacttccagattaaaatgcaaaattacaacaacaaaatatgggaaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAATTCAAAGCCTTCACAAATACAGCAAAGGCCACAGAAGAGGGATGTCAAGATGTAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAGCAATGAGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                117022 TACCAAGGAAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCCATAGACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGAATTCAAAGCCTTCACAAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCAAGTCCAACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCC
                                                                                                                                                                                                                                                                               TCATTTTGGAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACCAAGGAAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCA
                                                                                                                                                                                                                AAAAGAGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGAAAT
                                                                                                                                                                                                                                                                                                                      TGATATGGGCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCG
                                                                                                                                                                                                                                                                                                                                                                                          GAAAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCAAAAACAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAAGTTGGATTTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACA
                                                                                                                                                                                      AAAAGAGGATGTAAAATCAGTGATAGAAAGTCATAAGATTGACCAAAAAACACAGGGAAAT
                                                                                                                                                                                                                                                        GGGTAAAGAGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTC
                                                                                                                       ACTACTGGGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGAC
                                                                                     Gaps
                                                                                     .
0
                                                     Length 172371;
                                                                                     Indels
                                                     Score 1464; DB 2;
Pred. No. 8.4e-267;
0; Mismatches 10;
     vector_side:right"
                                                       Query Match
Best Local Similarity 99.3%;
Matches 1470; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    117082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1030
                                                                                                                                                                                       130
                                                                                                                                                                                                                                                                                                                          250
                                                                                                                                                                                                                                                                                                                                                                                            310
                                                                                                                                                                                                                                                                                                                                                                                                                                                            370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 670
                                                                                                                       70
                                                                                                                                                                                                                                                                                        117682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             117442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 117202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    116962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    116902
                                                                                                                                                                                                                      117742
                                                                                                                                                                                                                                                         190
                                                                                                                                                                                                                                                                                                                                                            117622
                                                                                                                                                                                                                                                                                                                                                                                                                            117562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            117502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             117382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             117322
                        ORIGIN
```

g 중 음 당

đ

g

ò

& ₽ ₽ ⋧ 8 8 ठे q ò Д ò ď ठे a

ö

145

205 9

265

116423

116483 1449

셤

ద à 원 ઠે

ò

8 8 8

```
94.4%;
                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                             1526
                                                                                             1441
                                          1466
        1406
                         1321
                                                          1381
                                                                                                                                                DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                         RESULT 7
AX098228
                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                          LOCUS
                    셤
                                         ò
                                                        g
                                                                            ò
                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAGCAAAAACAAATAAAAAAAAAAAAGAGGAGCCAAAGTTGGTTAAATTATTGACAGGA 1285
                                                                                                                                                                                                                                                                                                                                                                                                                 GACAGATITIGITATIGAAGIGGACATIATICCACAGITCTCIGAAIGCCAATAIGAITAC 1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCCAGATTAAAATGCAAAATTACAACAAAAATATGGGAACAAAGTAAAAAATTCTCA 1105
                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                                              985
                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                             805
                                                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                         865
                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                            925
                                                                                                                                                                              540
                                                                                                                                                                                               685
                                                                                                                                                                                                               600
                                                                                                                                                                                                                                  745
                                                                                                                                                                                                                                                   9
                                                   445
                                                                     360
                                                                                      505
                                                                                                       420
                                                                                                                         565
                                                                                                                                         480
                                                                                                                                                           625
240
                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CACCCAGATCAAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTGCTGTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTTATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACAAACCCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGGAAGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAAATTCTCA
                                                                                                                                                          CGALTIGCTICAGCTICTATGAATICACGIACCAATGGCACTATICATTITIGGAGICAAA
                                                                                                                                                                                                                                                                                        661 CGATTTGCCTTCAGCTTGTATGAATTCACGTACCAATGGCACTATTCATTTTGGAGTCAAA
                                                                                                                                                                                                                                                                                                        GACAAACCCCATGGGAAAATTGTTGGCATGAAGTCACCAATGATACCAAGGAAGCCCTC
                                                                                                                                                                                                                                                                                                                                            ATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCCAACAAGCA
                                                                                                                                                                                                                                                                                                                                                    CTATTTGTGCGAGATGGGACCCTCTAAGGACATTACGAAAAATAAAGTTGATTTCAGA
                                                                                                                                                                                                           CTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCGGATACATGAATTCAAAGCCTTC
                                                            CTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCAAAGCCTTC
                                                                                                                                                                                                                                  ACAAATACAGCAAACAGCACAGAAGAGGATGTCAAGATGAAATTTAGCAATGAGGTTTTC
CATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAGCCATTGAA
                                                                                       GATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCACTAAAAGTT
                                                                                                      GATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCACTAAAAGTT
                                                                                                                         GATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTAAAAGACCAAACT
                           241 GATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTAAAGACCAAACT
                                                   GTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCAAAAACAAAAGGGTAAAGAACCCA
                                                                                                                                                                                                                                                                                                                                              998
                                                                                                                                                                                                                                                                                                                                                                                926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1261
                                                                                                                                                                                                                                                                                                                                                                                                                    986
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1046
                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        196
                                                                                                                                                                                                                                    989
                                                                                                                                                                                                                                                                      746
                                                                                                                                                                                                                                                                                                          908
                                                    386
                                                                      301
                                                                                        446
                                                                                                        361
                                                                                                                           206
                                                                                                                                           421
                                                                                                                                                             999
                                                                                                                                                                               481
                                                                                                                                                                                                626
                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                           721
 181
                   326
                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \dot{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      원
장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          පු පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                          6 B 6 B 6 B
                                                                                                                                                                                                                                                                                    g &
                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                            ઠે
```

```
/ GOGOD SEATE—1
/ COCODING SEATE—1
/ COCODING SEATE—1
/ COCODING SEATE—1
/ COCODING SEATE—1
/ COCODING SEATE—1
/ COCODING SEATE—1
/ COCODING SEATE—1
/ COCODING SEATE—1
/ COCODING SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
/ CASS SEATE—1
                                                                                                                                                                                                                                             1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 30-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         encoded thereby
                                                                    GAGITIGAICCIGAGICTAACAICAAIGGAGIGGICAAAGCTIACAAAGAAAGCCGAGIA
                                                                                                                                                                                                      GCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAAACCACACCAAATGAGACGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 6233;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Peyman, J.A., da Silva, A., Hochman, P. and Hsu, A. Interferon induced polymucleotides and proteins Patent: Wo Cil8208-A 3 1-SAAR-2001; Curagen Corporation (US); BIOGEN, INC. (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1462.4; DB 6;
Pred. No. 3.3e-266;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .6233
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9506"
/db_4770
/note="unnamed protein product"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX098228 6233 bp
Sequence 3 from Patent W00118208.
AX098228 AX098228.1 GI:13515357
                                                                                                                                                                                                                                                                                                                                                                                                            1464
                                                                                                                                                                                                                                                                                                                              TCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                                                                                                                                                                  TCTACTCTAAATCTTTACCATCAA
```

```
1166
                                                               1141
                                                                                 1286
                                                                                                                      1346
                                                                                                                                        1261
                                                                                                                                                                                                1466
                                                                                                                                                                                                                  1381
                                                                                                                                                                                                                                      1526
                                           1226
                                                                                                    1201
                                                                                                                                                           1406
                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                              AC092513/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                    RESULT
                                                           8 6 6 6
                                                                                                                                                    B &
                                                                                                                                                                                           8 8
                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                    g
         8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCCAGATTAAAATGCAAAAATTACAACAACAAAATATGGGAACAAAGTAAAAATTCTCA 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAATATGATTAC 1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTATITIGEGGAGAGGACCAGCTCTAAGGACATITACGAAAATAAAGTEGATTTCAGA 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
 ö
                  145
                                                                                            265
                                                                                                                                                  240
                                                                                                                                                                     385
                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                505
                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                     565
                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                         625
                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                              685
                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                   745
                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                          805
                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          205
                                                                        120
                                                                                                             180
                                                                                                                               325
                                                                                                                                                                                        300
                                   9
                                                                CAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACTGAACAAGAC
                                                                                                      301 GIGICICAAAAGGAACGIAGAAACIICAAAGCAAAAACAAAAAGGGIAAAAGAAACCA
                                                                                                                                                                                                                                                                                               ACAAATACAGCCACACAGAAGAGAATGTCAAGATGAAATTTAGCAATGAGGTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACAAACCCCCATGGGAAAATTGTTGGTGCATCAAAGTCACCAATGATACCAAGGAAGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCCAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCCAGATTAAAATGCAAAATTACAACAAAAATATGGGAACAAAGTAAAAATTCTCA
                                                                                                                                                  181 CATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAGCCATTGAA
                                                                                                                                                                                241 GATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTAAAGACCAAACT
                                                                                                                                                                                                                                                          481 TGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGATTTAGT
                                                                                                                                                                                                                                                                                                                                                                                 CTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCAAAGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                    ACAAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAATTTAGCAATGAGGTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                          CGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTATTCATTTTGGAGTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTATTCATTTTGGAGTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGGAAGCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCCAACAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTATCT
                              1 ATGGCAAAGCAAATTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGGATGTAAAT
                                                                                            GTGAATGGAGCAGTCTTGAAGTGGTTAAAAAAAAACATCTTGTTGATATGGGCATCACA
                                                                                                                                CATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACAGCCATTGAA
                                                                                                                                                                     GATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAAATGCTCCTAAAGACCAAACT
                                                                                                                                                                                                          GATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAAAGTT
                                                                                                                                                                                                                                                                                                                          TGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTACAAGTTGGATTTTAGT
                                                                                                                                                                                                                                                                                                                                                              CTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTCAAAGCCTTC
                  86 ATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAGGGATGTAAAT
                                                       146 CAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACTGAACAAGAC
 Gaps
 .
0
 Indels
 ä
 Mismatches
 .
0
Conservative
Matches 1463;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1046
                                                                                                                                                                                                          386
                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                     909
                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                    989
                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                          746
                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021
                                                                        61
                                                                                          206
                                                                                                                                566
                                                                                                                                                                     326
                                                                                                                                                                                                                                                446
                                                                                                                                                                                                                                                                                                                          999
                                                                                                                                                                                                                                                                                                                                                               626
                                                                . d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 6 6 6 6 6 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>ନ</u> ର
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \dot{\delta}
                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                               S G
                                                                                                                                                                                                                                                                                                                   & A
                                                                                                                                                                                                                                                                                                                                                              &
원
                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                      ó
                                                                                                        원 상 원
                                                                                                                                                                                                                                               ઠે
                               g
                                                  ઠે
                                                                                       õ
                                                                                                                                                               දු පු
                                                                                                                                                                                                   ò
```

```
мсиудэцэ
Papio anubis clone RP41-474E21, WORKING DRAFT SEQUENCE.
AC092513
                                                                                                            1345
                                                                                                                                      1260
                                                                                                                                                                   1405
                                                                                                                                                                                             1320
                                                                                                                                                                                                                          1465
                                                                                                                                                                                                                                        GCAAACCTTCAACTTTCCAAGTGTATATGTAGAACAGAAAACCACACCAAATGAGACGATT 1525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAAACCTTCCAAGTGTATATGTAGAACAGAAAACCACACAAATGAGAAGTT
GCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAAGCAGCAGAAAAAATTC
                  1081 GCATTTAAAGCAGATTTTAAAACACTGGCAGAGACTCCAGAAAAGCAGCAGAAGAAAATTC
                                                                                                           AATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACAAATAGC
                                                                                                                           CACCCAGATCAAACAAAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTGCTGTATTG
                                                                                                                                                                                            cacccacarcaaacaaaacacrradarrrrccrcaagcaaarraaargcrrrgcrcrarrr
                                                                                                                                                                                                                          8717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Direct Submission
Submitted (13-07D-2001) NIH Intramural Sequencing Center,
Grovemont Circle, Galthersburg, MD 20877, USA
3 (bases 1 to 176350)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Center code: NISC
Web site: http://www.nisc.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: nisc zoo@nhgri.nih.gov ----- Project Information Center project name: aml
                                                                                                                                                                                                                                                                                                                                          TCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                                                                                                                                              1441 TCTACTCTAAATCTTTACCATCAA 1464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DRAFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AC092513.2 G1:21465392
HTG; HTGS PHASE2; HTGS DRAF:
Papio anubis (olive baboon)
Papio anubis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 176350)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Green, E.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Green, E.D
```

```
550
                                                                                                                                                                                                                                                      670
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1150
                                               310
                                                                                370
                                                                                                                 430
                                                                                                                                                                                                                      610
                                                                                                                                                                                                                                                                                                                        790
                                                                                                                                                                                                                                                                                                                                                          850
                                                                                                                                                                                                                                                                                                                                                                                            910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98353
                                                                                                                                                                                                                                                                                       730
                                                                                                                                                                                                                                                                                                                                          98773
                                                                                                                                                                                                                                                                                                                                                                                                            98653
                                                                                                                                                                                                                                                                                                                                                                                                                             970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98473
                                                                                                                                                                                                                                                                                                                                                                           98713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98293
              250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                               8 6 8 6 8 6 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                          8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                            6 6 6 6 6
                              쉱
                                                              පු
                                                                               8 8
             ઠે
                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            249
           ACTACTGGGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="clone overlaps with GenBank Accession Number AC092407 clone RP41-402M16 (center project name amk)" 136968. 176350
//note="clone overlaps with GenBank Accession Number AC092515 clone RP41-6601 (center project name ami)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
                                                                                                                                                                                                                                    NOTE: This is a 'working draft' sequence. It currently consists of 1 contigs. Gaps between the contigs are represented as runs of N. The order of the pieces is believed to be correct as given, however the sizes of the gaps between them are based on estimates that have provided by the submittor.

This sequence will be replaced by the finished sequence as soon as it is available and the accession number will be preserved.

1 176350; contig of 176350 bp in length.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 2; Length 176350;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 90.2%; Score 1396.8; DB 2; Length : Best Local Similarity 96.5%; Pred. No. 4e-254; Matches 1428; Conservative 0; Mismatches 52; Indels
                                                                                                                                                                                                                                                                                                                                                                   /clone="RP41-474E21"
/clone_lib="RP41"
1. .176350
/note="assembly_fragment
                                                                                                                                                                                                                                                                                                                                          /organism="Papio anubis"
/mol_type="genomic DNA"
/db_xref="taxon:9555"
Center clone name: 474E21
                                                                                                                                                                                                                                                                                                                                                                                                                      ...or_side:right"
1. .44288
                                                                                                                                                                                                                                                                                                                                                                                                      clone_end:SP6
vector_side:left
clone_end:T7
                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              190
                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ਨੇ
```

```
98474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98534
                                                                                                                                    99194
                                                                                                                                                                                                                                                                         99074
                                                                                                                                                                                                                                                                                                                                            99073 TGAGTCACTAAAAGTTGAGCTCATAGAAGATAAAATAGATTATACAAAGGAAAGGCAACC 99014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           849
                                                                                                                                                                                                                                                                                                                                                                                                                                                     699
                                                                                                                                                                                                                                                                                                             549
                                                                                                                                                                                                                                                                                                                                                                                 609
                                                                                                                                                                      429
                                                                                                                                                                                                                                        489
                                                                                                                                                                                                                                                                                                                                                                                                   98833 TAGCAATGAGGTFTTCCGAATTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rcagerccaacaagcaaagaagrecarrccaagaccaagarrrcrcaagarrrracrecc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAAAGTTGATTTCAGAGCATTTTAAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAAGTTGGATTTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAGCAATGAGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAATAGTACTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGCCAATATGATTACTTCCAGATTAAAATGCAAAATTACAACAAAATATGGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1090 AAGTAAAAATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1270 TAAATTATTGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCATTTTGGAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGA
                                                 99253 GAAAACAGCCATTGAAGATTCAATTCAGACATCTAAGATGAGAAAGCCCAGTAAAAATGC
                                                                                                                                                                                            99193 TCCTAAAGCAAACGTGTCTCAAAAGGAAAGTAGAGAAACTTCAAAGGAAAAAAA
                                                                                                                                                                                                                                                                ATCCATAGACCTGACATGTGTATCATATCCATTTGATGAATTCAGTAATCCATATCGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGAATTCAAAGCCTTCACAAATACAGCAACAGCACAAAAAGAGGAGATGTCAAGATGAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACCAAGGAAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTGAAGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCAAGTCCAACAAGAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCC
GAAAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAAATGC
                                                                                                                                                                        GGGTAAAGAGAACCCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTC
                                                                                                                                                                                                                                                                                                             490 TAAGTCACTAAAAGTTGAGCTCATAGAAGATAAAATAGATTATACAAAGGAAAGGCAACC
```

PQ. ò

셤 ò 셤

ò

RESULT 9 AC105435/c LOCUS DEFINITION ORGANISM

ACCESSION VERSION KEYWORDS SOURCE REFERENCE AUTHORS

TITLE JOURNAL REFERENCE AUTHORS TITLE JOURNAL

REFERENCE AUTHORS TITLE

COMMENT

```
170584 GGIATCAGAATGGCAGCACACATAACTTGCCAAAAATACGGATGACTGGACCAAAGAG 170525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           137 GATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACT 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    77 GGIATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Sus scrofa"
//organism="Sus scrofa"
//ol type="genomic DNA"
//db xref = RP44-307B12"
//clone lib="RP44"
/ note="clone overlaps with GenBank Accession Number AC105370 clone RP44-36615 (center project name cav)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 175424;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 67.7%; Score 1048.6; DB 2; Best Local Similarity 83.1%; Pred. No. 2.1e-188; Matches 1224; Conservative 0; Mismatches 234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11542. -23012

/note="assembly_fragment"

23113. .31457

/note="assembly_fragment"

31558. .148674

/note="assembly_fragment"

148775. .175424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'note="assembly_fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             note="assembly_fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           clone_end:SP6 __
vector_side:right"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         clone_end:T7
vector_side:left"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . .11441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                        98114
                                                                                                                                                                                   1449
                                                                                                                                                                                                                                                                                                                                  AC105435 175424 bp DNA linear HTG 18-JUL-2002 Sus scrofa clone RP44-307B12, WORKING DRAFT SEQUENCE, 5 ordered
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Direct Submission
Submitted (05-JAN-2002) NIH Intramural Sequencing Center, 8717
Grovemont Circle, Gaithersburg, MD 20877, USA
3 (bases 1 to 178424)
Green, B.D.
                                              Direct Submission
Submitted (18-JUL-2002) NIH Intramural Sequencing Center, 8717
Grovemont Circle, Gaithersburg, MD 20877, USA
On Jul 18, 2002 this sequence version replaced gi:18071331.
Center: NIH Intramural Sequencing Center
Center code: NISC
Web site: http://www.nisc.nih.gov
Contact: nisc_zoo@nhgri.nih.gov
Contact: nisc_zoo@nhgri.nih.gov
                                                                                        1390 ATGGTTTGCTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGGTCAAAGCTTA
                                                                                                                        CAAAGAAAGCCGAGTAGCAAACCTTCCACTTTCCAAGTGTATATGTAGAACAAAAACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The sequence data in this record represents an 'enhanced' version of a Phase 2 submission. Specifically, the indicated outdar and orientation of each sequence contig has been established using one or more of the following: read-pair data from individual subclones, overlaps with neighboring clones, alignment with available reference sequence (e.g., human), and/or confirmation by PCR testing. In addition, the sequence assembly is based on at least 8x average coverage in Q20 bases and has been reviewed to rule out gross misassemblies, the low-quality ends of sequence
                                                                                                                                                                                                                                         98053 ACCAAATGAGAAGATTTCTACTCTGAATCTTTACCATCAA 98014
                                                                                                                                                                                                                       1510 ACCAAATGAGAGGATTTCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Center project name: caw
Center clone name: 307B12
                                                                                                                                                                                                                                                                                                                                                                                  AC105435
AC105435.2 GI:21903575
HTG; HTGS_PHASE2; HTGS_DRAFT.
Sus scrofa (pig)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 (bases 1 to 175424)
Green, E.D.
```

```
HTG 19-JUL-2002
                                169336 AATAAATGCCATCCGACTCAGATAAAACACTTAGATTTCCTAAAGGAAATTAAGTGGTTT
                                                                                        GCTGTTGGAGTTTGATCCTGAATCTGTGAGTGAGGTGTGCTCAAAGCTTTACAAAGAA
                                                                                                                                       169216 AGCCGAGTAGTTAACCTTCACTTTCCAAGTTTATATGTGGAGGGGGAAAACCA---CAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (01-FEB-2002) NIH Intramural Sequencing Center, 8717 Grovement Circle, Gaithersburg, MD 20877, USA. 1 to 108538) Green, E.D.
AATAAATGCCACCAGATCAAACAACACTTAGATTTCCTGAAGGAAATTAAATGGTTT
                                                                   GCTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGGTCAAAGCTTACAAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The sequence data in this record represents an 'enhanced' version of a Phase 2 submission. Specifically, the indicated order and orientation of each sequence contig has been established using one or more of the following: read-pair data from individual subclones, overlaps with neighboring clones, alignment with available reference sequence (e.g., thuman), and/or confirmation by PCR testing. In addition, the sequence assembly is based on at least 8X average coverage in Q20 bases and has been reviewed to rule out gross misassemblies, the low-quality ends of sequence contigs have been trimmed away, and each base is associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Direct Submission
Submitted (19-JUL-2002) NIH Intramural Sequencing Center, 8
Grovemont Circle, Gaithersburg, MD 20877, USA
On Jul 19, 2002 this sequence version replaced gi:18464069.
                                                                                                                                                                                                                                                                                                                                    bp DNA linear
WORKING DRAFT SEQUENCE.
                                                                                                                                                                                                                                             169159 dagaadarrarragrergaarerraareaada 169127
                                                                                                                                                                                                             GAGACGATTTCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Center code: NISC
Web site: http://www.nisc.nih.gov
Contact: nisc_zoo@nhgri.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Center project name: cjo
Center clone name: 500G08
                                                                                                                                                                                                                                                                                                                                Bos taurus clone RP42-500G8, 1
                                                                                                                                                                                                                                                                                                                                                                                   AC108893.2 GI:21909465
HTG; HTGS PHASE2; HTGS_DRAFT.
Bos taurus (cow)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (bases 1 to 108538)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Green, E.D.
 1337
                                                                     1397
                                                                                                                                       1457
                                                                                                                                                                                                             1517
                                                                                                     169276
                                                                                                                                                                                                                                                                                                  RESULT 10
AC108893/C
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                            g
                                                                                                   원
                                                                                                                                                                       g
                                                                                                                                                                                                             à
                                                                     à
                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             169756 CAAAAAGCGAAGAACTGCATTCGAGAGTTTTGTAGAAGTTTTACTGCCAAACAGT 169697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAAAATGCAGACTGAAAACAAAAAAAGAGAGGGGGACCAAAACTTGTTAAATTG 169397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTAACAGGAAATTAAGGATTTGTTAGATAATTCATACTATGACTGGTACATTCTTGTAATA 169337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 169876 GGAGTCAAGGACAAACCCCATGGAAAAATTGTTGGCGTGGAAGTCACCACTGTCACCAAG 169817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAGCCTTCATTGACCACTTCAATATGATGATCCACCAGTATTTTGAAGACCATCAGGTC 169757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTCCATCTGACAGATTTGTTATTGAAGTGGATGTTGTTCCCAAAATATTCTGAATGTGAA 169637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  169636 CAAGAGTATTTCCAGATTAAAATGCAAAATTACAGCAACAAGACATGGAAACAAAGTCCA 169577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATTCAAAACATTTAAACTGGATTTAAAAAACTGGCAGAAGCTAGGAAAGAGCCAGAA 169457
                                                  170404 GGTATAACATTTGGGCCAGCTATCCAGATAGAACATTTATTCAAAGAGTTGATGGAAACA 170345
                                                                                                               170344 TCCACTGAAGATCCTTCTCAGATTTGTAAGAGGAGAAAGGCAGTAAAGATGTTCCTAAA 170285
                                                                                                                                                                                                                                                                                                                                    170176 CTTAACAATGAATTCATGGAAGATGAAATAAATGACACAGAAAAAGCAGACATCATCTGTA 170117
                                                                                                                                                                                            170237
                                                                                                                                                                                                                                                                170236 GAGACATCAGATAGAGTTACTGACTCTACAATAAGTACAGTTACTGAAGGTTCTATGTCA 170177
                                                                                                                                                                                                                                                                                                                                                                                                           170057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               169997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     169996 AAAGCCTTCACAAACACAGAAACAGCCACAAAAGAGGATGTTAAGATGAAATTTAGCAAT 169937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           169877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAAAATTCAGAGCAAAAAAAAAAAAAAAAAGAAGGAGGACCAAAGTTGGTTAAATTA 1276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGTGAATGCCAA 1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATGATTACTTCCAGATTAAAATGCAAAATTACAACAAAATATGGGAACAAAGTAAA 1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAACA 1336
                                                                                                                                                            436
                                                                                                                                                                                                                                                                                                                                                                         919
                                                                                                                                                                                                                                                                                                                                                                                                                                             919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      916
                                                                                                                                                                                                                                496
                                                                                                                                                                                                                                                                                                    556
                                                                                      376
                  GGCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACA 316
                                                                                                                                                                                 GAACTGATGTGTGTACCATACCCTTTTGATGAATTCAGTGATCCATATCGTTACAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAG
                                                                                                                                                            GACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAAGCAAAAACAAAAGGGTAAA
                                                                                                                                                                                                                                GAGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCA
                                                                                                                                                                                                                                                                                                      GACCTGACATGTGTATCCATATCCATTTGAATTCAGTAATCCATATCGTTACAAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                               GATTTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               170056 AATTTTAGTCTACAGCCTGAAACAGGACCACTCAATCTCATTGATCCAATACATGAATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGCCTTCACAAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAATTTAGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTATTCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAACAAGCAAAGAAGTTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAATTCTCACTATTTGTGCGAGATGGGACCCAGCTCTAAGGACATTACGAAAAATAAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAA
                                                                                      GCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATT
                                                                                                                                                            377
                                                                                                                                                                                                                                                                                                                                                                         557
                                                                                                                                                                                                                                                                                                                                                                                                                                               617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1037
                                                                                                                                                                                                                                437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1277
                                                                                                                                                                                                                                                                                                                                                                                                           170116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           169936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    169816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            169696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       169576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .69516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 169456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       169396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   677
                                                                                      317
                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                   8 8 8
                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                  \overset{\sim}{\sigma}
                                                                                                               g
                                                                                                                                             ò
                                           셤
```

734

53070

794

53010

914

854

53190

614

```
52889 GTACTCTATCTGACAGATTTGTTATTGAAGTGGATGTTGTTCCAAAATATTCTGAATGTG 52830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                52469 riccircriccacirricaricricaricricracaccaccercriccicaaecaracaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     52409 MAACCCAAGTAAATCTTCACTTCCCAAGTTTGTATGTGGAGGGGAAAACCA---CAA
                                                                                                                                                                                                                                                                                                                                                                            1095 AAAAATTCTCACTATTTGTGCGAGATGGGACCCAGCTCTAAGGACATTACGAAAAATAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               52709 recarrircaaaccarriraaarracarrircaaaaccarrecacacaaarcraccacacac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAACAGAAAACCACACAA
                                                                                                                                                                                                                                                                                                                                                                                                                        TCCAACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                            TIGCIGIATIGGAGITITGAICCIGAGICIAACAICAAIGGAGIGGICAAAGCITACAAAG
                                    53249 TGAATTTTAAACTACAGGCCTGAAACAGGACCACTCAATCTCATTGATCCAATACATGAAT
                                                                                                                                                                                53189 icaaagccircacaaacacacaaaacaggcacaagaagaagaagargcraaaargaaarriagca
                                                                                                                                                                                                                                            rregagicaaggacaagccrcarggaacaarrigriggcgrggaarrracaccarcaaca
                                                                                                                                                                                                                                                                                                                                                        <u>AGGAAGCCCTCATTAACCATTTCAATCTGATGATAAACAAGTATTTTGAAGACCATCAAG</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTACTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTCTGAATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATATGATTACTTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGAACAAAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGAAAATTCAGAGCAAAAACAAATAAAAAAAAAAAGAGAGGGGCACCAAAGTTGGTTAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATTGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGTACATTCTTGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAAATAAATGCCACCCAGATCAAACAAACACTTAGATTTCCTGAAGGAAATTAAATGGT
                                                                            TGGATTTTAGTCTACAGCCTGAAACAGGACCAGGCAATCTCATTGATCCGATACATGAAT
                                                                                                                                                 TCAAAGCCTTCACAATTACAGCAACAGCCACAGAAGAGGATGTCAAGATGAAATTTAGCA
                                                                                                                                                                                                                     ATGAGGTTTTCCGATTTGCTTCAGCTTGTATGAATTCACGTACCAATGGCACTATTCATT
                                                                                                                                                                                                                                                                                    TIGGAGICAAAGACAAACCCCAIGGGAAAATIGTIGGCAICAAAGICACCAAIGAIACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1515 ATGAGACGATTTCTACTCTAAATCTTTACCATCAA 1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGAGAAGATTACTAGTCTGAATCTTTATCAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ďq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   148278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AC079885
                                                                                                                                                                                                                     735
                                                                                                                                                                                                                                                                                                                                                                                                                         915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1395
                                                                                                                                                   675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 52769
                                                                                615
                                                                                                                                                                                                                                                     53129
                                                                                                                                                                                                                                                                                      795
                                                                                                                                                                                                                                                                                                                       53069
                                                                                                                                                                                                                                                                                                                                                        855
                                                                                                                                                                                                                                                                                                                                                                                         53009
                                                                                                                                                                                                                                                                                                                                                                                                                                                            52949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               52829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        52649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         52589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             52529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 11
AC079885/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ď
                                                                                                                                                                             6 6 6 6 6 6 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 6 8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                        g
                                                                              δ
                                                                                                       В
                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     53712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           53592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             53532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  53430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   53370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       53310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        53652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              53472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                53531 CATCCTCTGGAGATCCTTTCCAGACATGTAAGAGGGGAAAAGGCAGTAAAAGTGTTCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAAGAAATCAGATAAGGTTAATGACTCTACAGTGAGTACAGTTACTAAAGGTTCTAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Taggrarcagaarggcacacaactraactraccagaaaaracagargacragacaaaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGGCATCACACACGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           reegcaraacarriegaccaecrarccaaaragaacaecrerreaagagriecregaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AA-----AGACAGAAAGATGGAGGACTTC----AAAACAAAAAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGAGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGATGTAAATCAGTGGTTAGAAAGTCATAAATTGAACAAAAACACAGAGCAATTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGAACAAGACGTGAATGGAGCAGTCTTGAAGTGGTTAAAAAAAGAACATCTTGTTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           crecacaagargreagregregraricrreaagracrraagargargargregra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCAAAAACAAAAGGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequencing vector: plasmid; n/a; 100% of reads
Sequencing vector: plasmid; n/a; 100% of reads
Sequencing vector: plasmid; n/a; 100% of reads
Assembly program: Phrap; version 0.990319
Consensus quality: 108439 bases at least Q40
Consensus quality: 108439 bases at least Q30
Consensus quality: 108439 bases at least Q30
Insert size: 105000; agarose-fp
Insert size: 108538; sum-of-contigs
Quality coverage: 13.02x in Q20 bases; agarose-fp
Quality coverage: 13.65x in Q20 bases; sum-of-contigs
                                                                                                                                                                                                               NOTE: This is a 'working draft' sequence. It currently consists of 1 contigs. Gaps between the connigs are represented as runs of N. The order of the pieces is believed to be correct as given, however the sizes of the gaps between them are based on estimates that have provided by the submittor.

This sequence will be replaced by the finished sequence as soon as it is available and the accession number will be preserved.

1 108338: config of 108538 bp in length.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 2; Length 108538;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. 1e-186;
0; Mismatches 227;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 1039.8;
Pred. No. 1e-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone_lib="RP42"
1. .108538
/note="assembly_fragment
                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Bos taurus"
/mol_type="genomic DNA"
/db_xref="taxon:9913"
/clone="RP42-500G8"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             vector side:left
clone end:T7
vector side:right"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                clone_end:SP6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  67.18;
a Phrap-derived
                                                                                                                                                                                                                                                                                                                                                                                                              1. .108538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 1227; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        53711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             53651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               53591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  53471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       53369
                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
```

g

g 8 &

ò

52710

1034

52470

1514

a a

ઠે g ઠે

8 8 8

셤 ₹

```
372 CTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGGAAAAACAAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
59.5%; Score 921; DB 2; Length 148;
Best Local Similarity 77.6%; Pred. No. 2.6e-164;
Matches 1173; Conservative 0; Mismatches 290; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ance="assembly_fragment"
|121523. 127993
| note="assembly_fragment"
| 128094. 148278
| note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone="RP31-246H18"
/clone_lib="RP31"
1. .18266
.hote="assembly_fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /db_xref="taxon:10116"
/chromosome="4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        clone_end:T7
vector_side:right"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                 Ludses I to 1481/9)

Akhter, N., Antonellis, A., Ayele, K., Beckstrom-Sternberg, S.M.,
Benjamin, B., Blakesley, R.W., Bouffard, G.G., Breen, K., Brinkley, C.,
Benokas, Dietrich, N.L., Granite, S., Guen, X., Guptea, J.,
Haghighi, P., Han, J., Hansen, N., Ho, S.-L., Idol, J.R., Karlins, E.,
Laric, P., Lee-Lin, S.-Q., Legaspi, R., Maduro, Q.L., Maduro, V.B.,
McJoskey, J.C., Masseri, B., Mastrian, S.D.,
McCloskey, J.C., Masseri, B., Mastrian, S.D.,
Portnoy, M.E., Prasad, A., Reddix-Dugue, N., Schueler, M.G., Sison, C.,
Stantripop, S., Thomas, J.W., Thomas, P.J., Touchman, J.W., Vogt, J.L.,
Wetherby, K.D., Wiggins, L., Young, A., Zhang, L.-H. and Green, E.D.
                                                                                                                                                                                       Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The sequence data in this record represents an 'enhanced' version of a Phase 2 submission. Specifically, the indicated order and orientation of each sequence contig has been established using one or more of the following: read-pair data from individual subclones, overlaps with neighboring clones, alignment with available reference sequence (e.g., human), and/or confirmation by PCR testing. In addition, the sequence assembly is based on at least 8% average coverage in Q20 bases and has been reviewed to rule out gross misassemblies, the low-quality ends of sequence contigs have been trimmed away, and each base is associated with a phrap-derived quality score.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (11-SEP-2002) NIH Intramural Sequencing Center, 8717 Grovemont Circle, Gaithersburg, MD 20877, USA On Sep 11, 2002 this sequence version replaced gi:11120768.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Direct Submission
Submitted (16-SEP-2000) NIH Intramural Sequencing Center, 8717
Grovemont Circle, Gaithersburg, MD 20877, USA
3 (bases 1 to 148278)
Rattus norvegicus chromosome 4 clone RP31-246H18 strain Brown Norway, WORKING DRAFT SEQUENCE, 6 ordered pieces. AC079885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NOTE: This is a 'working draft' sequence. It currently consists of 6 contigs. Gaps between the contigs are represented as runs of N. The order of the pieces is believed to be correct as given, however the sizes of the gaps between them are based on estimates that have provided by the submittor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequencing vector: plasmid; n/a; 100% of reads Chemistry: Dye-terminator Big Dye; 100% of reads Assembly program: Phrap; version 0.990319
Consensus quality: 146350 bases at least Q40
Consensus quality: 147462 bases at least Q30
Consensus quality: 147462 bases at least Q20
Insert size: 145000; agarose-fp
Chality coverage: 11.71%; nm O20 bases; agarose-fp
Quality coverage: 11.71% in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Center: NIH Intramural Sequencing Center
Center code: NISC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AC079885.3 GI:22779511
HTG; HTGS PHASE2; HTGS DRAFT.
Kattus norvegicus (Norway rat)
Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (bases 1 to 148278)
                                                                                                                                                                                                                                                                      (bases 1 to 148278)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Green, E.D
                                                                               VERSION
KEYWORDS
SOURCE
ORGANISM
     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
```

```
311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        312 AAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAAATGCTC 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               114143 AAATGGGCATAACCCATGGGCCAGCTATCCAAATAGAAGAGCTATTCAAAGAATTGCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 114323 TACAGCTAATCAGAATGGCAGAGACACTCAACCTTCCAAAAAACACAGATGACTGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      114263 AAGAGGATGTAAACCTGTGGCTAGAAGTCATAGGATTGACCAAAAGCACAGGGAAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  252 ATATIGGGCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      72 TACTGGGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       132 AAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             42863. 83567 --
hote-massembly_fragment"
78240. 148278 --
/note-"clone overlaps with GenBank Accession Number
AC084240 clone RP31-103L21 (center project name rl)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
* This sequence will be replaced

* by the finished sequence as soon as it is available and

* the accession number will be preserved.

* 18267 18366 contig of 18266 bp in length

* 18367 18365 gap of unknown length

* 42763 42862; contig of 24396 bp in length

* 42763 42862; contig of 40705 bp in length

* 83668 121422; contig of 40705 bp in length

* 121423 121522; app of unknown length

* 121423 121522; app of unknown length

* 121523 127933; contig of 6471 bp in length

* 121529 128093; contig of 6471 bp in length

* 121529 128093; contig of 6471 bp in length

* 121529 128093; contig of 6471 bp in length

* 121529 128093; contig of 6471 bp in length

* 121529 128093; contig of 6471 bp in length

* 121529 128093; contig of 6471 bp in length

* 121529 128093; contig of 6471 bp in length

* 121529 128094 128093; contig of 6471 bp in length

* 121529 128094 128093; contig of 6471 bp in length

* 121529 128094 128093; contig of 6471 bp in length

* 121529 128094 128093; contig of 6471 bp in length

* 121529 128094 128093; contig of 6471 bp in length

* 121529 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 128094 12809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Clone end:SP6 — vector side:left"

1. 3899

AC079437 clone overlaps with Genbank Accession Number AC079437 clone RP31-275K4 (center project name rj)"
18867. 42762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 148278;
```

```
The sequence data in this record represents an 'enhanced' version of a Phase 2 submission. Specifically, the indicated order and orientation of each sequence contig has been established using one or more of the following: read-pair data from individual subclones, overlaps with neighboring clones, alignment with available reference sequence (e.g., human), and/or confirmation by PCR testing. In addition, the sequence assembly is based on at least 8X average coverage in Q2D bases and has been reviewed to rule out gross misassemblies, the low-quality ends of sequence contigs have been trimmed away, and each base is associated with a phrap-derived quality score.

Sequencing vector: plasmid, n/a; 100% of reads Chemistry: Dye-terminator Big Dye; 100% of reads Assembly program: Phrap; version 0.990319
Consensus quality: 179812 bases at least Q40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Center project name: rl
Center clone name: 103L21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Green, E.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Green, E.D.
                                                                                                                                                                               RESULT 12
AC084240/c
                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                     셤
                                                                                                                      ద
                                                                                         ò
                                                                                                                               CITICAATGAGIICAGIAAICCAIAICGIIACAAAITACAITICAICCIACAGCIGAAA 113739
                                                                                                                                                                                                                                                                                                                                                                                                                              CAGCCACAGAGGAGGACATAAAGATTTTAGGAAGGAAGTCTTCCGATTTGCTTCAG 113619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                113558 GAAGGATTGTTGGCATGGAGCTCACCACCACTACAAGATGCCCTCATTGACCACTTCA 113499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        113975 CTGAAGAGAACTCATGCAAGGCTGACACTCTGCAGTGGAGCAAAGGAAACTCACAAA 113916
                                                                                                                                                                                                                                                                                                                                                           113679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTGTATGAACTCACGTACTAATGGCACCATTCATTTTGGAGTCCAAGACAAACCCCAAG 113559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Treaderrearancarrecacaararreagaarecaaagaagarrecreeaaraaaaa 113319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          113138 Argenageaacadreaddddaaaaacraarraacricridacadaaaraagarcrigc 113079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          113855 ATAAAGCAGTCCA---ACAGGATAAGCAGGCATCTCCAGGACCAACGTGCATTGCATATC 113799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rdchrrecchrangargandandechdandanrrcchanahrachdentrichenend 113259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ccaaacaccradarrrccrdaaggaaarraaardgrrrdcrgracragagrrrgarccrd 112959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             112958 AGTCTGAGAGCAATGGTGTGGTCAAGGCTTTCAAAGGAAGCCGAGTAGCAAACCTCCACT 112899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TIGAAGIGGACATIAITCCACAGIICTCIGAAIGCCAAIAIGATIACTICCAGAITAAAA 1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCAAAATTACAACAACAAAATATGGGAACAAAGTAAAAAATTCTCACTATTTGTGCGAG 1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1179 ATTITAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAAAAATTCAGAGCAAAAACAA 1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATAAAAAAGAAAGAGGGACCAAAGTTGGTTAAATTATTGACAGGAAATCAAGATTTGT 1298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTOTAACATCAATGGAGTGGTCAAAGCTTACAAAGAAAGCCGAGTAGCAAACCTTCACT 1478
                                                                                                                                                                                                                                                                                                                         698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                938
                                                                                                                                                                                                                                                                                                                                                                                               758
                                                                                                                                                                             ATANANTAGATTATACAAAGGAAAGGCAACCATCCATAGACCTGACATGTGTATCATATC 578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTGTATGAATTCACGTACCAATGGCACTATTCATTTTGGAGTCAAAGACAAACCCCATG 818
                                                                                                                                                                                                                                                                                                                       CAGGACCAGGCAATCTCATTGATCCGATACATGAATTCAAAGCCTTCACAAATACAGCAA
                                                                                                                                                                                                                                                                                                                                                       113738 checcearcharterentralecearrangaerrangeerrangeerrangen
                                                                                                                                                                                                                                                                                                                                                                                            CAGCCACAGAAGAAGATGACAAGATGAAATTTAGCAATGAGGTTTTCCGATTTGCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCCAACAAGCAAAGAAGTGCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTTGACAGATTTGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----AGTACAACTGCTAAAGGTTCTAAGTCACTAAAAGTTGAGCTCATAGAAG
                                                                                                                                                                                                                                                  CATTICATGAATICAGTAATCCATATCGTTACAAGTIGGATTITAGICTACAGCCTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAAAATTGTTGGCATCAAGTCACCAATGATACCAAGGAAGCCCTCATTAACCATTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGGGACCAGCTCTAAGGACATTACGAAAATAAAGTTGATTTCAGAGCATTTAAAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTGCTGTATTGGAGTTTGATCCTG
                                    GTAAAGAGAACCCAGATATGGCTAATCCGTCTGCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1419
                                                                                                                                                                               519
                                                                                                                                                                                                                                                  579
                                                                                                                                                                                                                                                                                                                       633
                                                                                                                                                                                                                                                                                                                                                                                              669
                                                                                                                                                                                                                                                                                                                                                                                                                              113678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          113378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                113318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1359
                                                                                                                                                                                                                                                                                    113798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   113618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     113438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          113018
                                                                                                                                                                                                                                                                                                                                              8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                 ద
                                                                                                                                                              8 8
                                                                                                                                                                                                                                         $ 8 $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                             \dot{\circ}
```

```
112898 Triccaagccratriraragaagaaaaacccacagraagagaaagarriccagrcraaarc 112839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AC084240
Rattus norvegicus chromosome 4 clone RP31-103L21 strain Brown
Norway, WORKING DRAFT SEQUENCE, 4 ordered pieces.
AC084240
AC084240
AC084240.
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084240.2
AC084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Akhter, N., Antonellis, A., Ayele, K., Becketrom-Sternberg, S.M.,
Benjamin, B., Blakesley, R.W., Bouffard, G.G., Brinkley, C., Brooks, S.,
Caraigag, K., Coleman, B., Engle, U., Granice, S., Guan, X., Gupta, J.,
Haphighi, P., Lee-Lin, S.-Q., Legaspi, R., Maduro, Q.L., Maduro, V.B.,
Margulies, E.H., Masiello, C., Maskeri, B., McDowell, J.,
Paguirigan, C., Pearson, R., Portnoy, M.E., Prasad, A.,
Reddix-Dugue, N., Schandler, K., Schueler, M.G., Sison, C.,
Stantripop, S., Thomas, J.W., Thomas, P.J., Touchman, J.W., Vogt, J.L.,
Wetherby, K.D., Wiggins, L., Young, A. and Green, E.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
1479 TTCCAAGTGTATATGTAGAACAGAAAACCACACAAATGAGACGATTTCTACTCTAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Direct Submission
Submitted (18-OCT-2000) NIH Intramural Sequencing Center, 8717
Grovemont Circle, Gaithersburg, MD 20877, USA
3 (bases 1 to 180665)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (06-DEC-2002) NIH Intramural Sequencing Center, Submitted (06-DEC-2002) NIH Intramural Sequencing Center, Grovemont Circle, Gaithersburg, MD 20877, USA On Dec 6, 2002 this sequence version replaced gi:10864175.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Center code: NISC
Web alte: http://www.nisc.nih.gov
Contact: nisc zoo@nbgri.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (bases 1 to 180665)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 180665)
                                                                                                                                                                                                                                                                                                                                                                                                                                                112838 TTTATCAGCAA 112828
                                                                                                                                                                                                                                                                                                   1539 TTTACCATCAA 1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rattus norvegicus
```

```
37195 AAACACCCAAAGAAATCTTACTAAGACATGTAAGAAGACAAAAAGGCAGAAAAAATATCC 37136
                                                                      ------agaagiagagacriicaaarcaaaacagagag 37088
                                                                                                                                     36550 GAGAGCCAAGATTTGTGGGAAGTTTTACTGCCAAATAGTACTCCATCTAATAAATTTGTTA 36491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  36370 ATGGTCCGAAAAGTAAGGACATCATAGGGAATAAAGCTGATTTCAAAGCTTTTAAGTTAG 36311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36130 ccaaacacciadaririccidaaGdaaariraaridGirirGCrdracraGaGrirGArCCrG 36071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGGAAGCAACAGGGCAAAAGCTAATTGACCTGTTGACAGGAATAAGGATCTGC
                                                                                                                                                                                                                                                                                                  36967 ATAAAGCAGTCCA---ACAGGATAAGCAGGCATCTCCAGGACCAACGTGCATTGCATATC
                                                                                                                                                                                                                                                                                                                                                             639 CAGGACCAGGCAATCTCATTGATCCGATACATGAATTCAAAGCCTTCACAAATACAGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                36730 criciaridaAcrcacciacraarccaaccarrcarrirdcacrccaacaccaaccaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   999 TTGAAGTGGACATTATTCCACAGTTCTCTGAATGCCAATATGATTACTTCCAGATTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTITAAAACACTGGCAGAGTCCAGAAAAGCAGCAGAAAAAAATTCAGAGCAAAAACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTGCTGTATTGGAGTTTGATCCTG
                                      CTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAAGCAAAAACAAAAAG
                                                                                                                                                                                       470 ------AGTACAACTGCTAAAGGTTCTAAGTCACTAAAAGTTGAGCTCATAGAAG
                                                                                                                                                                                                                          37027 ggacrgcaagrccagaggcraaaggrrcraaartcagaaaaaaaargaccragragaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            699 CAGCCACAGAAGAGGATGTCAAGATGAAATTTAGCAATGAGGTTTTCCGATTTTGCTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTGTATGAATTCACGTACCAATGGCACTATTCATTTTGGAGTCAAAGACAAACCCCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              819 GGAAAATTGTTGGCATCAAAGTCACCAATGATACCAAGGAAGCCCTCATTAACCATTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36670 caaccatrostroccatocaccricaccacriaacatroccitatroaccatrica
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        36490 TTGAGGTGGATATCATTCCACAATATTCAGAATGCAAGAAGATTTCTTCCAAATAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCAAAATTACAACAAAAATATGGGAACAAAGTAAAAAATTCTCACTATTTGTGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGGGACCAGCTCTAAGGACATTACGAAAATAAAGTTGATTTCAGAGCATTTAAAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATAAAAAAGAAAGAGGACCAAAGTTGGTTAAATTATTGACAGGAAATCAAGATTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     519 ATAAAATAGATTATACAAAGGAAAGGCAACCATCCATAGACCTGACATGTGTATCATATC
                                                                                                                                                                                                                                                                                                                                           CATTIGATGAATICAGIAATCCATATCGTTACAAGITGGATTTTAGTCTACAGCCTGAAA
                                                                                                               37135 CTAAAACCCAGAC-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36310
                                                                                                                                                                                                                                                                                                                                             579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1239
                                          372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 के वि के
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            임 상 임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ያ ያ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                               δ
                                                                                                                                               ద
                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         37256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  37255 AAATGGGCATAACCCATGGGCCAGCTATCCAAATAGAAGAGCTATTCAAAGAATTGCAGA 37196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   37316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      37435 TACAGCTAATCAGAATGGCAGAGACACTCAACCTTCCAAAAACACAGATGACTGGACAA 37376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     * NOTE: This is a 'working draft' sequence. It currently consists of 4 contigs. Gaps between the contigs are represented as runs of N. The order of the pieces is believed to be correct as given, however the sizes of the gaps between them are based on estimates that have provided by the submittor.

This sequence will be replaced

* by the finished sequence as soon as it is available and the accession number will be preserved.

* 5392 5491: contig of 5391 bp in length

* 5492 51132: contig of 45641 bp in length

* 5123 146593: contig of 95361 bp in length

* 146594 180665: contig of 93372 bp in length

I location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 37375 AAGAGGATGTAAACCTGTGGCTAGAAAGTCATAGGATTGACCAAAAGCACAGGGAAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         252 ATATGGGCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAAATGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              132 AAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAAACACAGGGAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Rattus norvegicus"
/mol_type="genomic DNA"
strain="Brown Norway"
/db_xref="taxon:10116"
/clone="Rat1-103121"
/clone="Rat1-103121"
/clone="Rat1-103121"
/clone="Rat1-103121"
/clone="clone overlaps with GenBank Accession Number AC079885 clone RP31-246H18 (center project name rk)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 48; Gaps
  Consensus quality: 180152 bases at least Q30 Consensus quality: 180275 bases at least Q20 Insert size: 138000; agarose-fp Insert size: 160000; pulse-field-gel Insert size: 180365; sum-of-contigs Quality coverage: 13.11x in Q20 bases; pulse-field-gel Quality coverage: 13.03x in Q20 bases; sum-of-contigs Quality coverage: 11.56x in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 180665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
59.5%; Score 921; DB 2; Length 1806
Best Local Similarity 77.6%; Pred. No. 2.5e-164;
Matches 1173; Conservative 0; Mismatches 290; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               vector side:left"
5492. .51132
/note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .5391
note="assembly_fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    clone_end:T7
vector_side:right"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 clone end:SP6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .180665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
```

36371

1058

1238

1418

셤

셤

g ò QQ 8

ò

36791

ઠ 셤 ઠે 8

g

```
Observe Sequencing Consortium.

Direct Submission

Submitted (10-MAY-2003) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA

On May 10, 2003 this sequence version replaced gi:24955744.

The sequence in this assembly is a combination of BAC based reads and whole genome shotgun sequencing reads assembled using Atlas (http://www.hgsc.bcm.tmc.edu/projects/rat/). Each contig described in the feature table below represents a scaffold in the Atlas assembly (a 'contig-scaffold'). Within each contig-scaffold, individual sequence contigs are ordered and oriented, and separated by sized gaps filled with Ns to the estimated size. The sequence may extend beyond the ends of the clone and there may be sequence contigs within a contig-scaffold that consist entirely of whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence ends. Both end sequences and whole genome shotgun sequence only contigs will be indicated in the feature table.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NOTE: Estimated insert size may differ from sequence length (see http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_data.html).
NOTE: This is a "working draft' sequence. It currently consists of 3 contigs. The true order of the pieces is not known and their order in this sequence record is
                                                                                                                                                                                                                                                                                                                                              Direct Submission
Submitted (22-SEP-2002) Human Genome Sequencing Center, Department
of Molecular and Human Genetics, Baylor College of Medicine, One
Baylor Plaza, Houston, TX 77030, USA
3 (bases 1 to 221557)
Rat Genome Sequencing Consortium.
Wright, D., Wright, R., Wu, J., Yakub, S., Yen, J., Yoon, L., Yoon, V., Yu, F., Zhang, J., Zhou, Y., Zhang, J., Zhou, Y., Zhang, J., Zhou, Y., Zhang, J., Youn, Niederhausern, A., Weiss, R., Smith, D.R., Holt, R.A., Smith, H.O., Weinstock, G. and Gibbs, R.A.
Direct Submission
Unpublished
2 (bases 1 to 221557)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5506 5605: contig of 5505 bp in length 5506 22023: contig of 214628 bp in length 220234 220333: gap of unknown length 220334 221557: contig of 1224 bp in length. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Center: Baylor College of Medicine
Center code: BCM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .2522
/note="wgs_end_extension
clone_end:T7"
                                                                                                                                                                                                                                                                                                              Rat Genome Sequencing Consortium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="genomic DNA"
/db xref="taxon:10116"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="clone_boundary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              clone="CH230-158021"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                  TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NEARS IN CAZALSSY)

MILDER, C. ALTHER, H. ALSDEOKOKS, S. ARMIN, A. ANDHINDO, D.
ANDEROCH, V. ANDEROKS, S. ARMIN, A. ANDHINDO, D.
ANDEROCH, V. ANDEROKS, S. ARMIN, A. ANDHINDO, D.
ANDEROCH, V. BACATACH, D. BATCHER, B. BEARGEGA, M. BENDEMOG, F.
Baldwin, D. Bandaranaike, D. Barber M. Beargead, M. Bendamed, F.
Biswalo, K. Blair, C. Burch, P., Burrell, K., Calderon, E.
Cadenas, V. Catter, K., Cavazos, I. Ceasar, T., Chen, Z., Chu, J.
Cardera, V. Catter, K., Cavazos, I. Ceasar, T., Chen, Z., Chu, J.
Cardera, V. Chavez, D. Chen, R. Cox, C. Coyle, M. Cree, D. D'Social, D'Davila, M. L. Devin, C. Dever, D'Din, W. Chen, Z. Chu, J.
Davila, M. L. Dugan-Footha, S. Dermon, C., Ding, Y. Dinh, M. Divaza, L.
Deraper, H., Dugan-Footha, S. Dermon, C., Ding, Y. Dinh, M. Divaza, C.
Frandes, S. Finley, M. Flagg, M. Forber, F. Ponton, M. Garza, M. Geberr, P.
Frandes, S. Finley, M. Flagg, M. Gracia, M. Garza, M. Geberr, P.
Frandes, S. Finley, M. Hamil, C. Hamilton, C., Hamilton, K.
Harvey, Y. Havlak, P. Hawes, A. Handerson, M. Horsen, M. Gerara, M. Gavaza, M.
Ganzatane, P., Handah, M. Hamil, C., Hamilton, C., Hamilton, K.
Harvey, Y. Havlak, P. Hawes, A. Hune, J. L. Hodgson, M. Hoghes, M.
Hollins, B. Howells, S. Hulyk, S. Hune, J. Li, M. May, J.
Jackson, L. Jacob, L. Jang, H., Johnson, B. Johnson, R.
Jackson, J. Jacob, M. P., Martin, K. Martinez, E.
Milosayljevic, A. Mine, E. Montemayor, J. Morris, S.
Mandaminey, S. Milos, M. P., Martin, K. Martinez, E.
Milosayljevic, A. Mine, G. Minja, E. Montemayor, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Martin, M. Mart
                                                                                                             ACL14055
221557 bp DNA linear HTG 10-MAY-2003
Rattus norvegicus clone CH230-158021, *** SEQUENCING IN PROGRESS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
ACTIONS
                                                           TTCCAAGTGTATATGTAGAACAGAAAACCACACAAATGAGAGAGTTTCTACTCTAAATC 1538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata; Vertebrata, Euteleostomi,
Mammalia; Eutheria; Rodentia; Sciurognathi, Muridae, Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AC134055.3 GI:30522024
HTG; HTGS PHASEL; HTGS DRAPT; HTGS ENRICHED.
Rattus norvegicus
Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus.
1 (bases 1 to 221557)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              35950 Trrarcaccas 35940
                                                                                                                                                                                                                                                                                                                                                                                                     TTTACCATCAA 1549
                                                                                                                                                                                                                           1479
                                                                                                                                                                                                                                                                                                                                                                                                     1539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 13
AC134055/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
```

99871

99931

99751

1358

```
100170 GAAGGATTGTTGGCATGGAGCTCACCACCGTCACTAAAGATGCCCTCATTGACCACTTCA 100111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AC108900 119266 bp DNA linear HTG 24-JUL-2002
Pelis catus clone RP86-299K23, WORKING DRAFT SEQUENCE, 2 ordered
pieces.
AC108900.2 GI:21954014
HTGS_PRASE2; HTGS_DRAFT.
FElis catus (cat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Carnivora, Fissipedia, Felidae, Felis.

1 (Dases I to 1926)

4 (Dases I to 1926)

8 Ather, N., Antonellis, A., Ayele, K., Beckstrom-Sternberg, S.M., Benjamin, B., Blakesley, R.W., Bouffard, G.G., Breen, K., Brinkley, C., Brooks, S., Dietrich, N.L., Granice, S., Guan, X., Gupta, J., Haghighi, P., Hansen, N. Ho, S.-L., Idol, J.R., Karlins, E., Laric, P., Lee-Lin, S.-Q., Legaspi, R., Maduro, Q.L., Maduro, V.B., Margulies, B.H., Masiello, C., Mackeri, B., Mastrian, S.D., McCloskey, J.C., McDowell, J., Paguirigan, C., Pearson, R., Phortnoy, M.E., Prasad, A., Schueler, M.G., Stantripop, S., Thomas, J.W., Thomas, P.J., Touchman, J.W., Tsurgeon, C., Vogt, J.L., Walker, M.A.,
                                                                                                                                                                                                   99930 igcártggcárahágargahahacarggcahahaharrcchaharactcggrcrtrgrghgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100110 arcrigaridaracriccagrarrrreaggriccarcaagriccaacaaggaagaggiccarric
                                                                                                                                                                                                                                                                                 TIGAAGIGGACATTATICCACAGTICTCIGAATGCCAATATGATTACTTCCAGATTAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99870 AIGGICCGAAAGIAAGGACAICAIAGGGAAIAAAGCIGAIIICAAAGCIIIIAAGIIAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99750 Arggalagcalacadorcaladorcala a descria a contra de calegala de contra de calegala de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAAAACACTTAGATTTCCTGAAGGAAATTAAATGGTTTGCTGTATTGGAGTTTGATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1419 AGICIAACATCAATGGAGTCGAAGCTIACAAAGAAAGCCGAGTAGCAAACCTICACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99570 AGTOTGAGAGGAATGGTGTGTCAAGGCTTTCAAAGGAAGCCGAGTAGCAAACCTCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1479 ITCCAAGTGTATATGTAGAACAGAAAACCACCACCAAATGAGACGATTTCTACTCTAAATC
                                                                                                                                                                   939 GAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAATAGTACTCTTATCTGACAGATTTGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGGACCAGCTCTAAGGACATTACGAAAATAAAGTTGATTTCAGAGCATTTAAAAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1239 ATAAAAAGAAGAGAGACCAAAGTTGGTTAAATTATTGACAGGAAATCAAGATTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCAAAATTACAACAAAAATATGGGAACAAAGTAAAAATTCTCACTATTTGTGCGAG
                                                              ATCTGATGATAAACAAGTATTTTGAAGACCATCAAGTCCAACAAGAAGAAGTGCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99450 rrharcaccaa 99440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITACCATCAA 1549
                                                                 879
                                                                                                                                                                                                                                                                                                                                                                                                 1059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1539
                                                                                                                                                                                                                                                                                       666
                                                                                                                                                                                                                                                                                                                                            06666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 14
AC108900/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                        음 상 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                     õ
                                                                                                             g
                                                                                                                                                                ₹
                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                        8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100467 ATAAAGCAGTCCA---ACAGGATAAGCAGGCATCTCCAGGACCAACGTGCATTGCATATC 100411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100527 GGACTGCAGCAAGTCCAGAGGCTAAAGGTTCTAAATCAGAAAAAATGACCTAGTAGAAG 100468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100587 cigaaddaacicaigcaadcigacaccicidcagigagaccagaaggaaacicacaaa 100528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100410 crritcaaridaggricagraariccararicgriacaaarracarritcarccracagccrigaaa 100351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100230 CTTGTATGAACTCACGTACTAATGGCACCATTCATTTTGGAGTCCAAGACAAACCCCAAG 100171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100695 AAACACCCCAAAAAAATCTTACTAAGACATGTAAGAAGACAAAAGGCAGAAAATATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGCCACAGAAGAAGATGAAATTTAGCAATGAGGTTTTCCGATTTGCTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           759 CITGIAIGAATICACGIACCAAIGGCACIATICATITIGGAGICAAAGACAAACCCCAIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGAGGATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAAACACAGGGAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATGGGCATCACATGGACCAGCTATTCAAATAGAAGTATTCAAAGAATTGCGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100755 AAATGGGCATAACCCATGGGCCAACTATCCAAATAGAAGAGCTATTCAAAGAATTGCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAACAGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCCAGTAAAAATGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTAAAGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAAGCAAAAACAAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ------AGTACAACTGCTAAAGGTTCTAAGTCACTAAAAGTTGAGCTCATAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATAAAATAGATTATACAAAGGAAAAGGCAACCATCCATAGACCTGACATGTGTATATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATTTGATGAATTCAGTAATCCATACCAAGTTGGATTTTAGTCTACAGCCTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGGACCAGGCAATCTCATTGATCCGATACATGAATTCAAAAGCCTTCACAAATACAGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                72 TACTGGGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     48;
                                                                                                                                                                                                                                                                                                                                                                                                                               Length 221557;
                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
59.5%; Score 921; DB 2; Length 22
Best Local Similarity 77.6%; Pred. No. 2.4e-164;
Matches 1173; Conservative 0; Mismatches 290; Indels
                                                                                                                                                                                                                                                                                                                    /note="wgs_end_extension
clone_end:Sp6"
                                                           end sequence:BH313763"
2573. . 5505
//note="wegs_contig"
36039. . 62916
//note="clone_boundary
clone_end:Sp6
site:EcoRI
end sequence:BH313765"
218385. . 220233
           clone_end:T7
site:EcoRI
                                                                                                 misc_feature
                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                                          misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     470
                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          · 8
```

දු පු

ઠે g &

g à

8 8 $\dot{\delta}$ 8 8 g පු ද ઠે

8 & 8

ර් සි

ઠે දි g

99571

COMMENT

```
misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             967
                                                                                                                                                                                                      8171
                                                                                                                                                                                                                                             8111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      907
                                                                                                     77
                                                                                                                                            137
                                                                                                                                                                                                                          256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  729
                                                                                                                                                                                   197
                                                               Query Match
                                                                        Best Local
                                           ORIGIN
                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                ठे
                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                       유
                                                                                                                                                              셤
                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                            ठ
                                                                                                                                                                                  ⋧
                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                               * NOTE: This is a 'working draft' sequence. It currently consists of 2 contigs. Gaps between the contigs are represented as runs of N. The order of the pieces is believed to be correct as given, however the sizes of the gaps between them are based on estimates that have provided by the submittor.

* This sequence will be replaced

* by the finished sequence as soon as it is available and the accession number will be preserved.

* TRSSW 78699 78697 pap of unknown length

* 78698 119266: contig of 40569 bp in length.
                                                                                                  Direct Submission
Submitted (24-JUL-2002) NIH Intramural Sequencing Center, 8717
Grovemont Circle, Gaithersburg, MD 20877, USA
On Jul 24, 2002 this sequence version replaced gi:18464076.
                                                               Center, 8717
     Zhang, L.-H. and Green, E.
                           Green, E.D.

Green, E.D.

Direct Submission

Submitted (01-FEB-2002) NIH Intramural Sequencing
Grovemont Circle, Gaithersburg, MD 20877, USA

(bases 1 to 119266)
                                                                                                                                                     Center: NIH Intramural Sequencing Center
Wetherby,K.D., Wiggins,L., Young,A., Zh
NISC Comparative Sequencing Initiative
Unpublished
                                                                                                                                                                        /clone lib="RP86"
1. .78597
/note="assembly_fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic DNA"
/db_xref="taxon:9685"
/clone="RP86-299K23"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Felis catus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cocation/Qualifiers
                                                                                                                                                                Center code: NISC
                                                                                             Green, E.D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                         AUTHORS
TITLE
JOURNAL
                                                                                REFERENCE
AUTHORS
TITLE
JOURNAL
                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
```

```
1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7355
                                                                                                                                                                                                                                                                                                                            8232
                                                                                                                                                                                                                                                                                                                                                                                                                                    8172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7891 ACTAAAAACTGAGTTCATGGAAGATGAAATAGATGACACAAAGGAAAGGCAGCCATCCAG 7832
                                                                                                                                                                                                                      13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8051 ATCCTCTGAAGATCTTAGTCAGACATGAAAGA-GGGAAAAGGTAGTAAAAATGTTCCTAA 7993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          996
                                                                                                                                                                                                                                                                                                             7934 AGAGAAATCAGTTATGGCTAATGTCTCTACAGTGGGTAC-------AGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7712 ATTCAAAACCTATTTGTGAAAATAGAGAAACAGCTGCAGAAGA-GATGTTAAGGTGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7593 CATTCATTTTGGAGTTAAAGGCAAACCCTATGGAAAAATTCTTTACATGAAAGTCACCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7473 CCATCAGGTCCAAAAAGCAAAGAAGTACATTTGAGAGCCAAGATTTGTAGACGTTTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7413 GCTAAACCGTAGGTATCCTGACAGATTTG-TATTGAAGCAAAGGTCATTACAAAGTACTC
                                                                                                                                                                                                                                                                           GGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAAAAGATAIGCATAGATATCTTGGAAGTGGTTAACGAAAATCACCTTGTTGATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               316 AGCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAATGCTCCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        376 AGACCAAACTGTGTCTCAAAAGGAACGTAGAGAAACTTCAAAGCAAAAACAAAAAGGGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              436 AGAGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         556 AGACCTGACATGTGTATCATATCCATTTGATGAATTCCAGTAATCCATATCGTTACAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7831 AGAACTGACATGTGTATCATACTTTTTTGATGAATT-TGTAACCCATATCACTACAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                616 GGATTTTAGTCTACAGCCTGAAACAGG---ACCAGGCAATCTCATTGATCCGATACATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTAGCAATGAGGTTTTCCGATTTGCTTCAGCTTGTATG--AATTCACGTACCAATGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Traccaardaactririccaarricciriccecriciaricaaaarricaccractaareccac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         787 TATTCATTTTGGAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rrrcaccaaggaggccrrcarrgaccarrrraaarrgargarccaccagrarrrrgaaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCATCAAGTCCAACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCAAATAGTACTCTATCTGACAGATTTGTTATTGAAGTGGACATTATTCCACAGTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                  8231 GATATAAATTGATGTTTGGAAAGTCATAGAATTAATCAAAAGCACAGGGAAATCTTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     673 ATTCAAAGCC----TTCACAAATACAGCAAAGGCCACAGAAGAGGATGTCAAGATGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAAACACAGGGAAATTTTGACT
vector_side:right"
7946. 119266
700ce="lone overlaps with GenBank Accession Number
700ce="0.000 verlaps with Genter project name awl)"
70105439 clone RP86-515N8 (center project name awl)"
                                                                                                                                                               Length 119266;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGATACCAAGGAAGCCCTCATTAACCATTTCAATCTGATAAAAAAGTATT
                                                                                                                                                                                                                   Indels
                                                                                                                                                            Score 788.4; DB 2;
Pred. No. 2.8e-139;
                                                                                                                                                                                                                      0; Mismatches 276;
                                                                                                                                                            50.9%;
                                                                                                                                                                                                                      Matches 1148; Conservative
                                                                                                                                                                                            Similarity
```

Вb

ò ď

δ

ò

Š

ò g В ઠે В ઠે g

ઠે

```
The sequence data in this record represents an 'enhanced' version of a Phase 2 submission. Specifically, the indicated order and orientation of each sequence contrig has been established using one or more of the following: read-pair data from individual subclones, overlags with neighboring clones, alignment with available reference sequence (e.g., human), and/or confirmation by PCR testing. In addition, the sequence assembly is based on at least 8X average coverage in Q20 bases and has been reviewed to rule out gross misassemblies, the low-quality ends of sequence conligs have been trimmed away, and each base is associated with a Phrap-derived quality score.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           **NOTE: This is a 'working draft' sequence. It currently consists of 5 contigs. Gaps between the contigs are represented as runs of N. The order of the pieces is believed to be correct as given, however the sizes of the gaps between them are based on estimates that have provided by the submittor.

This sequence will be replaced by the finished sequence as soon as it is available and the accession number will be preserved.

**H4669 contig of 44668 bp in length 44669 72218 contig of 27450 bp in length 72319 94001 contig of 27450 bp in length 94001 entity of unknown length 94101 gap of unknown length 94102 94101: gap of unknown length 94102 94101: gap of unknown length 94102 196623: contig of 102522 bp in length 94102 196623: contig of 20252 bp in length 196624 225885: contig of 29162 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone_lib="RP81"
1. .18000
/note="clone overlaps with GenBank Accession Number
AC110665 clone RP81-144D11 (center project name avt)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequencing vector: plasmid; n/a; 100% of reads (Chemistry: Dye-terminator Big Dye; 100% of reads Assembly program: Phrap; version 0.990119 consensus quality: 225008 bases at least Q40 Consensus quality: 225434 bases at least Q30 Consensus quality: 225424 bases at least Q20 Insert size: 180000; agarose-fp and the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the prop
On Aug 7, 2002 this sequence version replaced gi:18958663
                                            Center: NIH Intramural Sequencing Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
1. 225885
/ organism="Canis familiaris"
/mol_type="genomic DNA"
/db_xref="texon:9615"
/clone="RP81-410018"
                                                                                                                                                               Web site; http://www.nisc.nih.gov
Contact: nisc zoo@nhgri.nih.gov
------ Project Information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          note="assembly_fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          note="assembly_fragment
                                                                                                                                                                                                                                                                                                                                            Center clone name: 410018
                                                                                                                                                                                                                                                                                           Center project name: avu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               clone_end:T7
vector_side:left"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .44668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia; Eutheria, Carnivora; Fissipedia; Canidae; Canis.

E (bases I to 225885)

S Akheer, N., Antonellis, A., Ayele, K., Beckstrom-Sternberg, S.M.,
Benjamin, B., Elakeeley, R.W., Bouffard, G.G., Breen, K., Brinkley, C.,
Benjamin, B., islakeeley, R.W., Bouffard, G.G., Breen, K., Brinkley, C.,
Brooks, S., Dietrich, N.L., Granite, S., (Auan, X., Gupta, J.,
Haghighi, P., Hansen, N., Ho, S.-L., Idol, J.R., Karlins, E., Laric, P.,
Ide-Lin, S.-Q., Legaspi, R., Maduro, Q.L., Maduro, V.B.,
Marquiles, E.H., Masiello, C., Maskeri, B., Mastrian, S.D.,
McCloskey, J.C., McDowell, J., Paquirigan, C., Pearson, R.,
Portnoy, M.E., Prasad, A., Schneler, M.G., Stantripop, S., Thomas, J.W.,
Wetherby, K.D., Wiggins, L., Young, A., Zhang, L.-H. and Green, B.D.
                                                                                                                                                                                                                1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7174 AGAGGCAGAAGAACATGCAAAGTAAAAACAAATAAAAAAGAGGTAAGGGACCAACACT 7115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1267 GGTTAAATTATTGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAAC----A 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1147 AAATAAAGTTGATTTCAGAGCATTTAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAA 1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                               7234 AAATAATGCAGATTTCAGAGCATTTAAATTAGATTTGAAAGCACTGTCAGAGTCTAGAAA 7175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1207 AGCAGCAGAAGAAAATTCAGAGCAAAAACAAATAAAAAGAAAAAAGAGAGGACCAAAGTT 1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1441 CAAAGCTTACAAAGAAAGCCGAGTAGCAAACCTTCACTTTCCAAGTGTATATGTAGAACA 1500
                                                TGAATGCCAATATGATTACTTCCAGATTAAAATGCAAAATTACAACAACAAAATATGGGA 1086
                                                                                                                                                                                                                                                                                               7294 ACTAAGTCCAAAATATTCAGTCTTCATGTGAGATGGGGCCAGCTCTAAAGACATCATGAA 7235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7054 ACACATTCTTGTGACAATAAATGCCATCTGAATCAAATAAAACACTTAGATTCCCTAAA 6995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6994 GGAAATITIAAIGACITIGCIGITITIGGAGTITIAAITCCIAAATCIGIGAGAGGGGGGIAGI 6935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6934 CAAAGATTACAAAGAAAG------------CCAAATCTGTATGTGTAGGG 6897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HTG 07-AUG-2002
                                                                                                                                                                                                                ACAAAGTAAAAATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Direct Submission
Submitted (07-AUG-2002) NIH Intramural Sequencing Center, 8717
Grovemont Circle, Gaithersburg, MD 20877, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1381 GGAAATTAAATGGTTTGCTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (27-FEB-2002) NIH Intramural Sequencing Center, 8717
Grovemont Circle, Gaithersburg, MD 20877, USA
3 (bases 1 to 225885)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACL11236 225885 bp DNA linear HTG 07-AUC Canis familiaris clone RP81-410018, WORKING DRAFT SEQUENCE, 5 ordered pieces:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1501 GAAAACCACACAAATGAGACGATTTCTACTCTAAATCTTTACCATCA 1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6896 GGAAAAATACAAAATGAGAAGATTTCTAGTCTGAATCTTTATCAACA 6849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AC113236.2 GI:22128671
HTG; HTGS PHASE2; HTGS_DRAFT.
Canis familiaris (dog)
Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to 225885)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rect Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3reen, E.D
                                                                                                                                                                                                           1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
AC113236/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
```

d

ઠ

```
1151
                                                                                                                                                                                                                                                                                                                                                                                                                       1329
                                                    973
                                                                                                                                                                                                                                                                                               1211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Search cor
Job time
                                                                                                                                                                                                                                                                                     2 4 5 4
                                                                           ద
                                                                                                     6 B 6
                                                                                                                                                                                            8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                  Š
                                                                                                                                                                                                                                                                                                                                  125898 GCTATCAGAATGACAGCACCACTGAACCTGCCAAAATTACAAATGACTGGGCAAAAGAA 125839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   125723 GGCATATCACATGGACATTC------AACCTATTCAAGATTTACAGAAAACA 125678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         125677 TCTTCTGAAGATCCTATTCAGACATGTAAGATGAAAAAG-GTAGTAAAAATGTTCCTAAA 125619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         125618 ATACAACCTTTTATGCAAGAGGAAATGGAGAAATTTCAAAGCAAAAACAAAATGATAAA 125559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   125558 GAGAAATCAGCTATAGCTAATGCCTCTACAATGAGTACAGTTACTAAAGGTTCTCAGCCA 125499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        125498 CTARARACTRAGTTCATGGRAGATGARATAGCTGACACARAGGARARTCAGCCATCCAGA 125439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             125380 AGITITAGICTGCATCCTGAAACAGGACCACCTCAACTTCATTGATCCAATACATGAA 125321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           125778 GCAAAAGAIGCACAIGGAGCAAICIIGAAGIGGI-----AAAAAICACCIIGIIGAIIIG 125724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           125438 GAATTAACATGTGTATCATA-CTTTTTGATGAATTC-GTGACTCATATCACTACAAATTG 125381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 125320 TTCAAAGCCTTCACAAAT-----AGCCACAGAA-AAAATGTTAAGGTGAAATTTAGC 125270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           125269 AA-CAAATTTTTCAATTTGCTTCTATGAAATTCACCTACTAATGGCACCATTCA 125211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          125210 TTTTGGAGTCAAAGGCAAAACCCCATGGAAAAACTGTTGACATGAAAGTCACCAATTGCAC 125151
                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCATCACACATGGACCAGCTATTCAAATAGAAGAACTATTCAAAGAATTGCGGAAAACA 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 792
                                                                                                                                                                                                                                                  77 GGTATCAGAATGGCAAAGCAACTTAACCTTCCAGAAAATACAGATGATTGGACAAAAGAG 136
                                                                                                                                                                                                                                                                                                              GATGTAAATCAGTGGTTAGAAAGTCATAAGATTGACCAAAAACACAGGGAAATTTTGACT 196
                                                                                                                                                                                                                                                                                                                                                                           317 GCCATTGAAGATTCGATTCAGACATCTAAGATGGGAAAGCCCAGTAAAATGCTCCTAAA 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCAAAGCCTTCACAAATACAGCAACAGCCACAGAAGAGGATGTCAAGATGTAAATTTAGC 733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTTGGAGTCAAAGACAAACCCCATGGGAAAATTGTTGGCATCAAAGTCACCAATGATAC 852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTCCAACAAGCAAAGAAGTGCATTCGAGAGCCAAGATTTGTGGAAGTTTTACTGCCAAA 972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAGGAAGCCCTCATTAACCATTTCAATCTGATAAACAAGTATTTTGAAGACCATCA 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACCTGACATGTGTATCATATCCATTTGATTCAGTAATCCATATCGTTACAAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          617 GATTTTAGTCTACAGCCTGAAACAGG---ACCAGGCAATCTCATTGATCCGATACATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATGAGGTTTTCCGATTTGCTTCAGCTTGTATG-AATTCACGTACCAATGGCACTATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACCAAACTGTGTCTCAAAAGGAACGTAGAAAACTTCAAAAGCAAAAAAAGGGTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGAACCCAGATATGGCTAATCCGTCTGCAATGAGTACAACTGCTAAAGGTTCTAAGTCA
                                                                                                                                                                                                                      Gaps
/note="clone overlaps with GenBank Accession Number AC110666 clone RP81-156E11 (center project name avv)' 196724. .255885 /note="assembly_fragment clone earsembly_fragment clone earsembly_fragment
                                                                            clone end.SP6 vector side:right" 23792- 225865 vector Actione overlaps with GenBank Accession Number Actil0671 clone RP81-69D24 (center project name avw)"
                                                                                                                                                                                                                      53;
                                                                                                                                                                                       Length 225885;
                                                                                                                                                                                   Score 759; DB 2; Length 22
Pred. No. 8.8e-134;
0; Mismatches 285; Indels
                                                                                                                                                                                     Query Match
Best Local Similarity 77.2%;
Matches 1143; Conservative
                                                                                                           misc_feature
                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   913
                                                                                                                                                                                                                                                                                                                                                                                                                                     257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         853
                                                                                                                                                                                                                                                                                                            137
                                                                                                                                                                                                                                                                                                                                                                           197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     674
                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                    \delta
                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    $ B
```

```
124673 TTGTAACAAATAATTCCATC----CAAATGAAACACCTAGATTTCCTAAAGGAAATTA 124620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             124850 AATGAAGATTTCAGAGCATTTAAATTAGATTTAAAAGCACTAGCAG-GTGTAGAAAAAAA 124792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 124791 GCAGAAGAAAAAGCAAAGTGAAAA --AAATAAAAAGGAGAGTAAAGGGATGAACACTTGTT 124734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            124733 AAATTGTTGACAGAAATCAGGATTTGTTTGATAATATACACAAACTGGTACACATTC 124674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    125090 GGTCCAAAAAGCAAAGAAGTACAATTGAGAGCCAAGGTTTGTAGACATTTTACTGCCGAA 125031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1328
                                                                                                                                                                                                                                                                                           125030 TAGTAAAATCTGTCTGACAGATTTGTTATTGAAGTGAATGTCATTCCAAAGTACTCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1271 AAATTATTGACAGGAAATCAAGATTTGTTAGATAATTCATACTATGAACAGT--ACATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1449 ACAAAGAAAGCCGAGTAGCAAACCTTCCAAGTGTATATGTAGAACAAAACCA
                                                                                                                                                                                                                                                   TGCCAATATGATTACTTCCAGATTAAAATGCAAAATTACAACAACAAATATGGGAACAA
                                                                                                                                                                                                                                                                                                                                                                                                              1091 AGTAAAAATTCTCACTATTTGTGCGAGATGGGACCAGCTCTAAGGACATTACGAAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     124910 AATCCAAAACATTTAGTCTTCATGCAAGATGGGGCCAACTCTAAGGACATGATGAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAGTTGATTTCAGAGCATTTAAAAGCAGATTTTAAAACACTGGCAGAGTCCAGAAAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGTAACAAATAAATGCCACCCAGATCAAACAAAACACTTAGATTTCCTGAAGGAAATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1389 AATGGTTTGCTGTATTGGAGTTTGATCCTGAGTCTAACATCAATGGAGTGGTCAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 124503 CATAAATGCACAGATTTCTAGTCTGAACCTTTATCAGTAA 124463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1509 CACCAAATGAGACGATTTCTACTCTTAAATCTTTACCATCAA 1549
```

earch completed: April 25, 2004, 18:58:31 ob time : 4090.84 secs BX334700 BX334700 AQ624094 HS 2100 A AQ145903 HS 2210 B BZ600533 WHACCO7TF B1911783 603065205 AQ108606 CIT-HSP-2 AV730039 AV731500

EX504960 DKFZp6861 BI460285 603201916 CF994492 AGENCOURT

AQ235894 HS 2013 B AL705106 DKFZP666H BG698619 602668423 BQ689079 AGENCOURT B30587 HS 1002-B2-BB142974 MRO-HT015 AQ566892 HS 2104-B AQ060641 CIT-H88-2 BF920768 MRZ-W7013

B33662 HS-1023-A1-BF759523 CM1-CT060 BG709419 602673471 BMS09480 ih19a07.y AQS86844 RPCI-11-4 AW876755 CM2-PT004

B49322 RPCI11-5P1 BE144970 RC6-HT01 BG718914 60269920

ij.

Title: Perfect score:

Sequence:

1

Run on:

Scoring table:

Searched:

Database

```
Distriction of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601587368F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3941440 5',
          BI460285
BX334492
BX334492
BX314993
AQ1624094
BZ64093
BZ600533
B1911783
AQ108666
AQ103666
AQ1032894
AV731500
AQ215894
AL705106
BQ689619
BQ689619
BG68619
BG68619
BG68619
BG68619
BG68619
BG68619
BG68619
BG68619
BG68619
BG68619
BG68619
BG68619
BG68619
BG68619
BG68619
BG68619
BG68619
BG68619
BG68619
BG68619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BG709419
BM509480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B58637
AQ278768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BG981236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BX112097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BE796744.1 GI:10217942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                      348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                    3E79674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2222222222
2222222222
888666444
                                                                                                                                                                                                                                                                                                                                                                                                                                             533.4
533.4
53.2
53.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1
BE796744
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                 0 0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BE796744 601587368
AQ418633 RPCI-11-2
BE901475 601674934
BI013264 PM4-ET015
                                                                                                              April 25, 2004, 07:00:48; Search time 763.869 Seconds (without alignments) 16458.288 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                        1 atggagtttcttcattctgg......ttctatgtcctttcagcgag 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                     55026578
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                              27513289 seqs, 14931090276 residues
                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BE796744
AQ418633
BE901475
BI013264
                                                                              using sw model
                                                                                                                                                                                                                                                                                 IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                em_gas_bro:*
em_gas_rod:*
em_gas_rod:*
em_gas_vrl:*
gb_gasl:*
                                                                                                                                                                                                                                                                                                                                                                                                                              Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gss hum:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     em_gss_fun:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      em_estba:*
em_esthum:*
em_esthum:*
em_estru:*
em_estro:*
em_estro:*
em_estro:*
em_estro:*
em_estro:*
em_estro:*
em_estro:*
em_estro:*
em_estro:*
                                                                                                                                                                                              US-10-051-835-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  em_estfun:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gb_htc:*
gb_est3:*
gb_est4:*
gb_est5:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            961
533
686
447
                                                                              nucleic search,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               _988_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    em gss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EST: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40.1
113.9
13.4
                                                                                                                                                                                                                      421
```

169 68.8 58.4

Score

Result No.

us-10-051-835-16.rst

```
Seq primer: T7
Class: BAC ends.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BE901475.1 GI:10390693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ch 16.3%;
1 Similarity 97.2%;
70; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            517 AACTCTGCGGTG 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 AACTCTGCGATG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BE901475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 3
BE901475/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

I (Dasses 1 to 533)

S Adao, S., Adams, M.D., Nierman, W., Malek, J., de Jong, P. and Venter, J.C.
Use of BAC End Sequences from Library RPCI-11 for Sequence-Ready Map Building
Unpublished (1997)

L Unpublished (1997)

Other GSSs: RPCT-11-20304.TJ

Contact: Shaying Zhao, William Nierman, Mark Adams
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850
Tel: 301 838 0208
Emmal: bheedigir.org
Clones are derived from the human BAC library RPCI-11. For BAC library availability, please contact Pieter de Jong
(Spiezeraced-ong) med.buffalo.edu, Clones may be purchased from RACRAC Resources (http://bacpac.med.buffalo.edu/ordering) or from BACRAC Resources (http://bacpac.med.buffalo.edu/ordering) or from Research Genet cs (info@resgen.com). BAC end search page:
http://www.tigr.org/tdb/humgen/bac_end_search/bac_end_search.html.
                                                                                                                               /organizem=nounc sequence.
//wol_type="mRNA"
//wol_type="mRNA"
//wol_type="mRNA"
//wol_e="nRNAE:394140"
//idon="nRyAE:394140"
//idon=nRyAE:394140"
//idon=nRyAE:39411 cell carcinoma"
//idon line="MGC3"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//idon line="MGC7"
//
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AQ418633 53.4MAR-1999 BNA linear GSS 23.4MAR-1999 RPCI-11-20304.TV RPCI-11 Homo sapiens genomic clone RPCI-11-20304, genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          170 ACGAACTICCCTIAGAAICAACCCAITIGIGAAACACCACATAAIAAGAGCAGIAICTI 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 110 rigiriceigereresitatis de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la respectation de la
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                78 ATGAACTICCCTTAGAATCAACCCATTIGTGAAACACCACATTAATAAGAGCAGTAICTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18 TGGTAGGTTCGTGGTCTCTCGGCTTCAGGAATGAAGCTGTAGAACTCTGCGATGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40.1%; Score 169; DB 10; Length 961; 92.2%; Pred. No. 5.4e-37; ive 0; Mismatches 15; Indels (
                                                                                                         organism="Homo sapiens"
          location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AQ418633.1 GI:4476357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        198 GACTCGGTCTCAG 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  290 GACTCGGTCTCAG 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 178; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 2
AQ418633
               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
```

셤

ð

g à 셤 ò

ਨੇ

```
601674934F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3957464 5',
                                                                                                                                                                                                                                                                                                                                  ö
1. .533

/ organism="Homo sapiens"

/ organism="Homo sapiens"

/ mol_type="genomic DNA"

/ db_xref="gbs-7577907"

/ db_xref="taxon:9806"

/ clone="Nptl-11-20304"

/ cell_type="Lymphocytes"

/ clone="Nptl-11"

/ clone="Vector: DBACe3.6; Site_1: EcoRI; Site_2: EcoRI;

RPCIII Human Male BAC Library"
                                                                                                                                                                                                                                                                                                                                                                                                                       457 Ardeachtrorrcatrorderdearrcerdercrorrerdecrroadaardaadcrorae 516
                                                                                                                                                                                                                                                                                                                                                              1 ATGGAGTITCTTCATTCTGGTAGGTTCGTGGTCTCTGGCTTCAGGAATGAAGCTGTAG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 680;

NIH-MGC http://mgc.nd.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cDNA Library Preparation: Ling Hong/Rubin Laboratory cDNA Library Preparation: Ling Hong/Rubin Laboratory cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incytte Genomics, Inc. Colone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: image.llnl.gov Plate: LLCK835 row: d column: 09 Flate: LLCK835 row: d column: 09 High quality sequence start: 3 High quality sequence cop: 686. High quality sequence stop: 686.
                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                       Length 533;
                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                     Score 68.8; DB 28;
Pred. No. 1.3e-08;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                               ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .686
/organism="Homo sapiens"
```

g ઠે g

```
BX504960

635 bp mRNA linear EST 04-SEP-2003
DXF2p686I13187_r1 686 (synonym: hlcc3) Homo sapiens cDNA clone
DXF2p686I13187_5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                   OT 25-NORMALIZED Homo sapiens cDNA
228 TGAGTTTCTTCTTGTGGTGGTTCTTGGTTCTTCGCTGGTTTCAGGAGTGAAGCTGCAGA 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo eapiens"
/mol_type="mRAN"
/mol_type="mRAN"
/db xref="txxxxn:9666"
/clone="CSODIO48YC03"
/clone="CSODIO48YC03"
/clone lib="Homo eapiens PLACENTA COT 25-NORWALIZED"
/note="lst strand cDNA was primed with a NotI-oligo(dT)
primer: Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and ECOR V
sites of the pCMVSPORT 6 vector. Library was normalized."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            229 TGGAGTTTATTCCTTCTGGTAGGTTCGTGTCTCGCTGACTTCAGGAGTGAAGCTGCAGA 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (1868) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (2018) 1 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
Homo sapiens
Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Rammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 635)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 56.6; DB 9; Length 598;
Pred. No. 3.7e-05;
0; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                AL549589 mRNA AL549589 Homo sapiens PLACENTA COT 25-NORN CLONE CODIO48YC03 5-PRIME, mRNA sequence. AL549589
                                                                                                                                                                                                                                                                                                                                                                                                          ALS49589.2 GI:31271407
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BX504960.1 GI:32032507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62; Conservative
                                                                                                                                                        168 cérriécagie 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   169 rciricocare 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62 ACTCTGCGATG 72
                                                                                                62 ACTCTGCGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Si
Matches 62;
                                                                                                                                                                                                                                                     RESULT 5
AL549589/c
                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 6
BX504960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            447 bp mRNA linear BST 13-JUN-2001
BIO13264.1 GI:14417335
BST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
1 (Bases I to 447)
1 (Bases I to 447)
1 (Bases I to 447)
Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
Brunstein,A., deoliveira,P.S., Bucher,P., Jorgeneel,C.V.,
O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="mRNA"

/db_xref="taxon:9606"

/db_xref="taxon:9606"

/do_stage="Adult"

/clone lib="Tolib="taron: Vector: pucl8; Site_1: Smal;

/note="Organ: lung_tumor; Vector: pucl8; Site_1: Smal;

/note="Organ: lung_tumor; Vector: pucl8; Site_1: Smal;

/note="Organ: lung_tumor; Vector: pucl8; Site_1: Smal;

/note="Organ: lung_tumor; Vector: pucl8; Site_1: Smal;

/note="Organ: lung_tumor; Vector: Patent application

No. 196,716 - Ludwig Institute for Cancer Research)

profiles into the pUC 18 vector: Reverse transcription of tissue mRNA and cDNA amplification were performed under
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pax: +55-11-2707001
This sequence was derived from the FAPESP/LICR Human Cancer Genome This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (futp.//www.ludwig.org.bz/scripts/gethtml2.pl?tl=PM4&t2=PM4-ET0154-200101-009-c09&t3=2001-01-20&t4=1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                       GGAGTITCITCTTCTTGTGGGGTTCGTGGTCTCGCTGGTCTCAGGAGTGAAGCTGCAGAC 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shotgun sequencing of the human transcriptome with ORF expressed sequence tags
Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
20202663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                             Gaps
                                                                                                                             .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                  Length 686;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13.4%; Score 56.6; DB 12; Length 447; Similarity 97.3%; Pred. No. 3.5e-05; 62; Conservative 0; Mismatches 9; Indels 0
                                                        ch 13.9%; Score 58.4; DB 10; Length Similarity 85.5%; Pred. No. 1.2e-05; 65; Conservative 0; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     low stringency conditions."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          High quality sequence stop: 446 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                     Ctriccicricardria 183
                                                                                                                                                                                                                                                                                                             78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rel: +55-11-2704922
                                                                                                                                                                                                                                                                                                      CTCTGCGATGCTGTTA
                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Brazi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Si
Matches 62,
                                                                                                                                                                                      m
                                                                                                                                                                                                                                                                                                          63
                                                                                                                                                                                                                                                                                                                                                                  198
                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 4
BI013264/c
LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE
PUBMED
COMMENT
                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
ORIGIN
```

REFERENCE

2 TGGAGTTTCTTCATTCTGGTAGGTTCGTGGTCTCTCTGGCTTCAGGAATGAAGCTGTAGA

```
CF994492
                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 8
CF994492/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Endeavora; Metacaa; Craniata; Vertebrata; Enteleostomi; Bukaryota; Metacaa; Chordata; Craniata; Vertebrata; Enteleostomi; Bukaryota; Metacaa; Primates; Catarrhini; Hominidae; Homo.

1 (Bases 1 to 766)

2 NIH-MoC http://mgc.nci.nih.gov/.

3 NIH-MoC http://mgc.nci.nih.gov/.

L Unpublished (1999)

L Unpublished (1999)

L Contact: Robert Strauberg, Ph.D.

Email: cgapbs-remail.nih.gov Ph.D.

Email: cgapbs-remail.nih.gov Palxovits, M.D., Ph.D.

Contact: Robert Strauberg, Ph.D.

Email: cgapbs-remail.nih.gov Palxovits, M.D., Ph.D.

Contact: Robert Strauberion: Michael J. Brownstein (NHGRI), Shiraki

CDNA Library Preparation: Michael J. Brownstein (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

Right quality sequence stop: 701.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 766 bp mRNA linear EST 21-AUG-2001
603201916F1 NIH_MGC_97 Homo sapiens cDNA clone IMAGE:5267955 5',
BI460285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     165 TGGAGTTTATTCCTTCTGGTAGGTTCGTGGTCTCGCTCACCTTCAGGAGTGAAGCTGCAGA 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGAGTTTCTTCATTCTGGTAGGTTCGTGGTCTCTGGCTTCAGGAATGAAGCTGTAGA 61
Poustka,A., Albert,R., Moosmayer,P., Schupp,I., Wellenreuther,R.,
Mewes,H.W., Weil,B., Amid,C., Osanger,A., Fobo,G., Han,M. and
                                                                                                                                                                          This is the 5' sequence of the clone insert
Clone from S. Wiemann, Molecular Genome Analysis, German Cancer
Research Center (DKFZ); Email s.wiemann@akfz-heidelberg.de;
sequenced by DKFZ (German Cancer Research Center,
Heidelberg/Germanny) within the cDNA sequencing consortium of the
German Genome Project.

No sl sequence available.

Nis clone (DKFZP666113487) is available at the RZPD in Berlin.
Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 14059
Berlin-Charlottenbrug, GBRMANY; Email: clone@rzpd.de.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .635
/organism="Homo sapiens"
/organism="Homo sapiens"
/mol_trpe="mixNa"
/db_xref="taxon:9606"
/clone="DXZ2p686f13187"
/dev stage="adult"
/lab_host="DH10B"
/clone lib="686 (synonym: hlcc3)"
/note="WetCor: pTriplBx2; Site_1: SfilA; Site_2: SfilB;
cDNA-collection"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 56.6; DB 13; Length 635;
Pred. No. 3.8e-05;
0; Mismatches 9; Indels 0
                                           Wiemann, S.

EST (Poustka, A., Albert, R., Moosmayer, P., Schupp, I., Unpublished (2003)
Contact: MIPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BI460285.1 GI:15250941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   th 13.4%; l Similarity 87.3%; 62; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTTTGCGGTG 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62 ACTCTGCGATG 72
                                                                                                                                                            MIPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BI460285/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                           JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
JOURNAL
COMMENT
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                   · FEATURES
                                                                 TITLE
```

d 8 q

```
/.doinglib="Univo"
//clonellib="Univo"
//clonellib="Organ: testis; Vector: pBluescriptR (modified
/note="Organ: testis; Vector: pBluescriptR (modified
/note="Organ: testis; Vector: pBluescriptR (stora)
/gtogas); Oligo-dT primed using primer
//criptritritritritrivN-3', size-selected for average
insert size 2.2 kb and normalized to ROT 5. This is
primary library enriched for full-length clones and
constructed using the Cap-trapper method (Carninci, in
preparation). Library constructed by M. Brownstein
(NIME/NHGRI, National Institutes of Health). Note: this is
a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST 25-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   242 TGGAGTTTCTTCCTTCTGTGGGTTCGTGGTTCTCGCTGGCTTCAGGAGTGAAGCTGCAGA 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 TGGAGTTTCTTCATTCTGGTAGGTTCGTGGTCTCTCTGGCTTCAGGAATGAAGCTGTAGA 61
                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                Score 56.6; DB 12; Length 766;
Pred. No. 4e-05;
0; Mismatches 9; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CF994492
AGENCOURT_15621259 NIH MGC_147 Homo sapiens cDNA clone IMAGE:30520429 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone="IMAGE:30520429"
/tissue_type="Human Placenta"
/lab_host="DH10B TonA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .906
/organism="Homo sapiens'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                clone lib="NIH_MGC 147"
                                                     /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5267955"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   High quality sequence stop: 564.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="mRNA"
/db_xref="taxon:9606"
Location/Qualifiers
                                                                                                                     host="DH10B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CF994492.1 GI:38510552
                                                                                                                                                                                                                                                                                                                                                                                                ch 13.4%;
l Similarity 87.3%;
62; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                182 cérredédera 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62 ACTCTGCGATG 72
                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
```

```
174 TCTTTGCGGTG 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  212 crccercerc 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   63 CICIGCGAIG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AQ145903.1
GSS.
                                                                                                                                                                                                                                                                                     sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10449764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AQ14590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hood, L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 11
AQ145903/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                              DEFINITION
                                                                                                              RESULT 10
AQ624094/c
                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
/note="Organ: placenta, Vector: pBluescriptR; Site_1: all_Xhol; Site_2: BamH; Oligo-dT primed using primer size 2: BamH; Oligo-dT primed using primer size 2: 3 kb and normalized to ROT 5. This is a primary library enriched for full-length clones and constructed using the Cap-trapper method (Carninci, in Freparation). Library constructed by M. Brownstein (NIMMI/NHGRI, Macional Institutes of Health). Note: This is a NIH_MGC library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BX334700
BX334700 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA clone CSODI005XJ22 5-PRIME, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               211 TGGAGTTTATTCCTTCTGGTAGGTTCGTGGTCTCGCTGACTTCAGGAGTGAAGCTGCAGA 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    234 recaditiratic criticis de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia de la confedencia del confedencia de la confedencia del confedencia del confedencia del confedencia de la confedencia de la confedencia del confedencia de la confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia del confedencia d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

1. (bases 1 to 990)

Li, W.B., Gruber, C., Jessee, J. and Polayes, D.

Full-length cDNA libraries and normalization

Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/mol_type="mRNA"
/mol_type="mRNA"
/db xref="tson:9606"
/clone="CSODIOOSYJ22"
/clone_type="mstAcENTA" COT 25-NORMALIZED"
/clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="lst strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime and enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and EcoR V
sites of the pCMVSPORT 6 vector. Library was normalized."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGAGTTTCTTCATTCTGGTAGGTTCGTGGTCTCTCGGCTTTCAGGAATGAAGCTGTAGA 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 TGGAGTITCTTCATTCTGGTAGGTTCGTGGTCTCTCTGGGCTTCAGGAATGAAGCTGTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
BMail: seqrefêgenoscope.cns.fr. Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 9886.f,
Contact: Feng Liang Email: filang@lifetech.com URL:
Contact: Feng Liang Email: filang@lifetech.com URL:
Paraday Avenue Genoscope sequence ID: CSODIOSDELIQPI.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                 Score 56.6; DB 14; Length 906;
Pred. No. 4.1e-05;
0; Mismatches 9; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 13; Length 990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 56.6; DB 13; Length Pred. No. 4.2e-05; O; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BX334700.1 GI:30308308
                                                                                                                                                                                                                                                                                                                                                                                 th 13.4%;
| Similarity 87.3%;
| 62; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         th 13.4%;
l Similarity 87.3%;
62; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              151 TCTTTGCGGTG 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 ACTCTGCGATG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 ACTCTGCGATG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 62; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S:
Matches 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BX334700/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ,
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
```

```
AQ624094 linear GSS 16-JUN-1999 HS_2100_Al_BlO_MR CIT Approved Human Genomic Sperm Library D Homo sapiens genomic clone Plate=2100 Col=19 Row=C, genomic survey
                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
1 (base1 to 498)
Mahairas,G.C., Wallace,J.C., Smith,K., Swartzell,S., Holzman,T.,
Keller,A., Shaker,R., Furlong,J., Young,J., Zhao,S., Adams,M.D. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AQ145903 518 bp DNA linear GSS 26-SEP-1998 HS_2219_B2_G02_MF CIT Approved Human Genomic Sperm Library D Homo sapiens genomic clone Plate=2219 Col=4 Row=N, genomic survey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               272 égagirirciriccircigereserricarestrereacrisserreasasasasasases 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          High Throughput Sequencing Center University of Washington University of Washington 401 Queen Anne Avenue North, Seattle, WA 98109, USA Tel: (206) 616-3618 Fax: (206) 616-3887 Email: jwallace@u.washington.edu Clones may be purchased from Research Genetics (info@resgen.com).BAC end Web Server: http://www.htsc.washington.edu Plate: 2100 row: C column: 19 Seq primer: M13 Reverse Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence-tagged connectors: A sequence approach to mapping and scanning the human genome
Proc. Natl. Acad. Sci. U.S.A. 96 (17), 9739-9744 (1999)
99380589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 GGAGTITCTICATTCTGGTAGGTTCGTGGTCTCTCTGGCTTCAGGAATGAAGCTGTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ch 13.2%; Score 55.6; DB 28; Length 498; I Similarity 87.1%; Pred. No. 6.9e-05; 61; Conservative 0; Mismatches 9; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
|mol type="genomic DNA"
|db_xref="taxon:9606"
|clone="Plate=2100 Col=19 Row=C"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Mahairas GG, Wallace JC, Hood L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              High quality sequence stop: 498.
Location/Qualifiers
                                                                                                                                                 AQ624094.1 GI:5086486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GI:3536556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /sex="male"
                                                                                                                                                                                                              Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
```

```
/clome_lib="NIH_MGC_118"
/note="Wcstor: pCWW-SPORT6; Site_1: NotI; Site_2: EcoRV
(destroyed); RNA source leukocytes from anonymous pool of
non-activated adult donors. Library is oligo-dT primed
    Fax: 415 502 5665
Email: svolik@cc.ucsf.edu
This clone is available from Amplicon Express
Class: BAC ends.
                                                                                                                      1. .765
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/clone="WCF7_1-14B13"
/sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /tissue_type="leukocyte"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /clone="IMAGE:5214409"
                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mRNA sequence. _ _
BI911783
BI911783.1 GI:16175655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63 CTCTGCGATG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               crrrecedre 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S:
Matches 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
BI911783/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia; Eutheria, Primates, Catarrhini, Hominidae, Homo.
I (bases 1 to 51)
Mahairas, G.G., Wallace, J.C., Smith, K., Swartzell, S., Holzman, T.,
Keller, A., Shaker, R., Furlong, J., Young, J., Zhao, S., Adams, M.D. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 765)
Volik, S., Zho, S., Chin, K., Brebner, J. H., Herndon, D. B., Tao, Q., Kowbel, D., Huang, G., Lapuk, A., Kuo, W. -L., Magrane, G., de Jong, P., Brd. sequence profilins, C.
End. sequence profiling, Sequence-based analysis of aberrant genomes Proc. Natl. Acad. Sci. U.S.A. 100 (13), 7696-7701 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BZ600533 765 bp DNA linear GSS 08-JUN-2003 WHACG07TF Human MCF7 breast cancer cell line library (MCF7_1) Homo appliens genomic clone MCF7_1-14B13, genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    333 TGGAGTTTCTTCCTTCTGGTGGGTTCGTGGTCTCGCTGGCTTCAGGAGTGAAGCTGCAGA 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /clone lib="CIT Approved Human Genomic Sperm Library D"
/note="Organ: sperm; Vector: pBeloBACll; BAC Clones in
E-Coli DH10B".
                                                                                                                                               Sequence-tagged connectors: A sequence approach to mapping and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                    scanning the human genome
Proc. Natl. Acad. Sci. U.S.A. 96 (17), 9739-9744 (1999)
99380589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 55.6; DB 28; Length 518; Pred. No. 6.9e-05; 0; Mismatches 19; Indels 0
                                                                                                                                                                                                                                                  Contact: Mahairas GG, Wallace JC, Hood L
High Throughput Sequencing Center
University of Washington
Tel: (206) 616-3618
Fars: (206) 616-3618
Fmall: 'Wallace@u.washington.edu
Sequence Tagged Connector
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Volik SV
Colin Collins' lab
UCSF Comprehensive Cancer Center
UCSF Box 0808, San Francisco, CA 94143-0808, USA
Tel: 415 502 7066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="genomic_DNA"
/db_xref="taxon:9606"
/clone="Plate=2219 Col=4 Row=N"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      High quality sequence stop: 518.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      273 CCTTGACGTTCCAGGTGAGTGTTACC 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62 ACTCTGCGATGCTGTTATGAACTTCC 87
                                                                                                                                                                                                                                                                                                                                                                                                                               Plate: 2219 row: N column: 4
Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BZ600533.1 GI:31508995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 77.9%;
Matches 67; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                         0449764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2788976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 12
BZ600533/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                           MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                      JOURNAL
                                                                                                                                               TITLE
```

셤 ò

```
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.

1 (bases 1 to 872)

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.
Email: Gapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
High quality sequence start: 27
High quality sequence start: 27
High quality sequence stop: 866.

I. . 872 (All Start Start)
Ince (LLAMIS)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BI911783 872 bp mRNA linear EST 16-OCT-2001
602065205F1 NIH_MGC_118 Homo sapiens cDNA clone IMAGE:5214409 5',
                                                                /note="Vector: pECBAC1; Site_1: HindIII; This library was constructed from MCF7 breast cancer cell line by Amplicon Express (http://www.genomex.com) using their standard procedure."
                                                                                                                                                                                                                                                                                                                                                                                                                                                         62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93
/clone_lib="Human MCF7 breast cancer cell line library MCF7 1,"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  152 GGAGTTTCTTCCTTCTGGCGGGTTCGTGGTCTCGCTGGCTTCAGGAGTGAAGCTGCAGAC
                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                ô
                                                                                                                                                                                                                                                                                                   13.2%; Score 55.6; DB 28; Length 765;
.larity 87.1%; Pred. No. 7.6e-05;
Conservative 0; Mismatches 9; Indels 0
```

us-10-051-835-16.rst

```
62 ACTCTGCGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
                                                                                                               RESULT 15
AQ077228/c
                                                                                                                                                                                                                                            KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ଚ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                    AQ108606 GSS 29-AUG-1998
CIT-HSP-2379119.TF CIT-HSP Homo sapiens genomic clone 2379119,
                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Venter, J.C.
Use of a random human BAC End Sequence Database for Sequence-Ready
Map Building
Unpublished (1998)
Other GSSS: OTT-HSP-2379119.TR
Contact: Mark Adams
Department of Eukaryotic Genomics
The Institute for Genomic Research
Tel: 301 838 0208
Fax: 301 838 0208
Eax: 301 838 0208
Email: madadam@tigr.org
Clones are available from Research Genetics (info@resgen.com). BAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size 1.7 kb, insert size range 1.2-3.3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 027. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     206 TGGAGTTTCTTCTTCTGGTGGGTTCGTGGTCTCGCTGGCTTCAGAGTGAAGCTGCAGA 147
                                                                                                                                                                                                                                                              649 GGAGTTTCTTCCTTCTGGTGGGTTCGTGGTCTCGCTGGCTTCAGGAGTGAAGCTGCAGAC 590
                                                                                                                                                                                                                            3 GGAGTITCTTCATICTGGTAGGTTCGTGGTCTCTCTGGCTTCAGGAATGAAGCTGTAGAA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     end search page:
http://www.tigr.org/tdb/humgen/bac_end_search/bac_end_search.html.
Seg primer: M13-21
Class: BAC ends.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
I (bases I to 640)
Adame, M.D., Rounsley, S.D., Zhao, S., Bass, S., Linher, K., Golden, K.,
Berry, K., Granger, D., Suh, E., Wible, C., Shizuya, H., Simon, M. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 TGGAGTTTCTTCATTCTGGTAGGTTCGTGGTCTCTGGCTTCAGGAATGAAGCTGTAGA
                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /sex="Male"
/cell_type="Sperm"
/clone_lib="CIT-HSP"
/note="Vector: pBeloBAC11; Site_1: HindIII; Site_2:
HindIII
                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                 13.2%; Score 55.6; DB 12; Length 872; larity 87.1%; Pred. No. 7.9e-05; Conservative 0; Mismatches 9; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 640;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13.1%; Score 55; DB 28;
Similarity 85.9%; Pred. No. 0.00011;
Conservative 0; Mismatches 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="genomic_DN
/db_xref="taxon:9606"
/clone="2379119"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AQ108606.1 GI:3485296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . .640
                                                                                                                                                                                                                                                                                                                                       sas chrececere sao
                                                                                                                                                                                                                                                                                                  72
                                                                                                                                                                                                                                                                                                  63 CICTGCGAIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                   Local Similarity
                                                                                                                                                                                     61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 61
                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                             RESULT 14
AQ108606/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                     Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
```

```
GSS 20-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Use of a random human BAC End Sequence Database for Sequence-Ready Map Building
Mupublished (1998)
Contact: Mark Adams
Department of Eukaryotic Genomics
The Institute for Genomic Research, 9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 0200
Fax: 301 838 0200
Email: maddamsequig.org
Clones are available from Research Genetics (info@resgen.com). BAC end search page:
                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 645)

4 (bases 1 to 645)

Berry, K., Granger, D., Zhao, S., Bass, S., Linher, K., Golden, K., Berry, K., Granger, D., Suh, E., Wible, C., Shizuya, H., Simon, M. and Venter, J.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         http://www.tigr.org/tdb/humgen/bac_end_search/bac_end_search.html.
Seg primer: M13 Reverse
Class: BAC ends.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 TGGAGTTTCTTCATTCTGGTAGGTTCGTGGTCTCTCTGGCTTCAGGAATGAAGCTGTAGA 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /cell type="Sperm"
/clone_lib="CIT-HSP"
/note="Vector: pBeloBAC11; Site_1: HindIII; Site_2:
HindIII"
                                                                                                                                                         AQ077228
CIT-HSP-2359F6.TR CIT-HSP Homo sapiens genomic clone 2359F6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 28; Length 645; 0.00011;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 55; DB 2
Pred. No. 0.000
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .645
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="genomic_DN;
/db_xref="taxon:9606"
/clone="2359F6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Search completed: April 26, 2004, 01:59:26
Job time : 767.869 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        location/Qualifiers
                                                                                                                                                                                                        genomic survey sequence.
                                                                                                                                                                                                                                    AQ077228
AQ077228.1 GI:3438412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13.1%;
85.9%;
                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61; Conservative
                                          146 ccrrccrccrc 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 215 ccirriccarie 205
72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62 ACTCTGCGATG 72
```

us-10-051-835-16.rni

```
DEBLEAUT: Dumas Milne Edwards, J.B.
APPLICANT: Ubmas Milne Edwards, J.B.
APPLICANT: Jobert, S.
APPLICANT: Glordano, J.S.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REPERRNCE: GRNSET: 054PR2
CURRENT PAPLICATION NUMBER: US/09/621,976
CURRENT FLILG DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 10548
LENGTH: 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Sequence 10548, Application US/09621976; Patent No. 6639063; GENERAL INFORMATION:
sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 64; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 2
US-09-621-976-10548/c
 RESULT 1
US-09-621-976-10375/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
CRGANISM: Homo BUS-09-621-976-10375
 TYPE: DNA
 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                     000000
   0 0 0 0 0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 10375, A Sequence 10548, A Sequence 1382, Ap Sequence 7956, Ap Sequence 8003, Ap Sequence 10506, A Sequence 14952, A Sequence 14952, A Sequence 14952, A Sequence 10134, Appli Sequence 10134, A Sequence 10134, A Sequence 10134, A Sequence 10134, A Sequence 10134, A Sequence 10134, A Sequence 10134, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A Sequence 10135, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       986, App
635, App
4, Appli
9027, Ap
                                                                                 April 25, 2004, 07:15:18 ; Search time 20.8853 Seconds (without alignments) 11186.557 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                    1 atggagittetteattetgg......ttetatgteettteagegag 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence Sequence Sequence
                                                                                                                                                                                                                                                                                                                                            Issued Patents NA:*

(/ggn2_6/ptodata/2/ina/5A_COMB.seq:*

(/ggn2_6/ptodata/2/ina/5B_COMB.seq:*

(/ggn2_6/ptodata/2/ina/6A_COMB.seq:*

(/ggn2_6/ptodata/2/ina/6B_COMB.seq:*

(/ggn2_6/ptodata/2/ina/PCTUS_COMB.seq:*

(/ggn2_6/ptodata/2/ina/PCTUS_COMB.seq:*

(/ggn2_6/ptodata/2/ina/Packflles1.seq:*
             GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-621-976-10375
US-09-621-976-10348
US-09-621-976-10382
US-09-621-976-9933
US-09-621-976-9935
US-09-621-976-8002
US-09-621-976-8003
US-09-621-976-8003
US-09-621-976-10595
US-09-621-976-10595
US-09-621-976-10353
US-09-621-976-10355
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
US-09-621-976-10353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-736-770-4
US-09-621-976-9027
US-09-621-976-10177
                                                                                                                                                                                                                                       Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                               682709 seqs, 277475446 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                             nucleic search, using sw model
                                                                                                                                                                             IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                US-10-051-835-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   486
80246
80595
80595
510
398
341
432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               44.8
44.6
44.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 46
45.4
45.2
45.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       46.2
                                                                                                                                   Title:
Perfect score:
                                                                                                                                                                               Scoring table:
                                                             nucleic
                                                                                                                                                           Sequence:
                                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                               Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Result
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        246
2554, A
2564, A
1085, A
389, Ap
, Appli
, Appli
994, Ap
8, Appli
0289, Ap
                                                                                                                                        10289, A
16336, A
10927, A
16337, A
10590, A
18235, A
18867, A
25, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63
                                                                                                                                                                                                                                                                                 Sequence 1, Appli
Sequence 10776, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 GAGITICITCATICIGGIAGGITCGIGGICICICIGGCITCAGGAATGAAGCIGIAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               305 GAGTITCTYCCTTCTGGTGGTTCGTGGTCTCGGCTTCAGGAGGTGAAGGTGCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                  Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                           Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 55; DB 4; Length 426;
Pred. No. 1e-08;
2; Mismatches 17; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 10375. Application US/09621976; Patent No. 6639063; GENERAL INFORMATION: GENERAL INFORMATION: APPLICANT: Jobert, S. APPLICANT: Glockano, J.Y.; APPLICANT: Glockano, J.Y.; TITLE REFERENCE: GENSET. 054R2; FILE REFERENCE: GENSET. 054R2; CURRENT FILING DATE: 2000-07-21 NUMBER OF SEQ ID NOS: 19335; SEQ ID NO 10375.
US-09-621-976-12564
US-09-621-976-12564
US-09-621-976-1085
US-09-621-976-9389
US-09-422-576D-6
US-09-422-576D-5
US-09-497-855A-38
US-09-621-976-10927
US-09-621-976-10927
US-09-621-976-10927
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
US-09-621-976-10590
                                                                                                                                                                                                                                                                                                                                                           ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                245 tridcedidagretracaectry 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64 TCTGCGATGCTGTTATGAACTTC 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13.1%;
ilarity 77.1%;
Conservative
```

0; Gaps

```
3 GGAGTTTCTTCATTCTGGTAGGTTCGTGGTCTCTCGGCTTCAGGAATGAAGCTGTAGAA 62
                                                                                    Query Match 12.3%; Score 51.6; DB 4; Length 356; Best Local Similarity 76.8%; Pred. No. 1.3e-07; Matches 63; Conservative 0; Mismatches 19; Indels (
                                                                                                                                                                                                                                                                                                                 207 chrceceriecherhacaach 186
                                                                                                                                                                                                                                                                       63 CTCTGCGATGCTGTTATGAACT 84
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-621-976-9793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                       RESULT 5
                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                     305 GAGITICITCCTICTGGTGGGTTCGTGGTCTCGCTGGTTCAGGAGTGAAGGTGCAGACC 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  303 ATGGAGTTTCTTCTTCTGGTAGGTTCGTGGTCCCGCTGACTTCAGGAGTGATGCTCACAC 244
                                                                                                                                                       4 GAGTITCTICATICTGGTAGGTICGTGGTCTCTGGCTTCAGGAATGAAGCTGTAGAAC 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 ATGGAGTTTCTTCATTCTGGTAGGTTCGTGGTCTCTGGCTTCAGGAATGAAGCTGTAG 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
12.5%; Score 52.8; DB 4; Length 579;
Best Local Similarity 83.3%; Pred. No. 6.5e-08;
Matches 60; Conservative 0; Mismatches 12; Indels 0; Gaps
                                                                                                               0; Gaps
                                                              13.0%; Score 54.8; DB 4; Length 501; 79.3%; Pred. No. 1.3e-08; tive 0; Mismatches 17; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 9793, Application US/09621976
Patent No. 6639063
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Jobert, S.
APPLICANT: GLOGATO, J.Y.
ITILE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENSET. 054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOCTWARR: Patent.pm
SEQ ID NO 9793
LENGTH: 356
                                                                                                                                                                                                                                                                                                                                                                          NESCOL-976-1382/C

Sequence 1382, Application US/09621976

Sequence 1382, Application US/09621976

Retent No. 663963

GENERAL INFORMATION:

APPLICANT: Dumas Milne Edwards, J.B.

APPLICANT: Glordano, J.Y.

TITLE OF INVENTION: ESTS and Encoded Human Proteins.

FILE REPRENCE: GENERT. 054PR.

CURRENT PILING DATE: 2000-07-21

NUMBER OF SEQ ID NOS: 19335

SOFTWARE: Patent.pm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: CDS

IOCATION: 40..246

NAME/KEY: sig_pebtide

IOCATION: 40..90

OTHER INFORMATION: von Heijne matrix

OTHER INFORMATION: score 9.5

OTHER INFORMATION: seq_FVFLLFVISLAAA/AH
US-09-621-976-1382
                                                                                                                                                                                                                                                                                           245 rrrdccercagrerracactr 224
                                                                                                                                                                                                                                                 64 TCTGCGATGCTGTTATGAACTT 85
                                                 Query Match
Best Local Similarity 79.3*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               243 Accirrigicard 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 AACTCTGCGATG 72
; ORGANISM: Homo sapiens
US-09-621-976-10548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-621-976-9793/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 1382
LENGTH: 579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                          ઠે
                                                                                                                                                                                                 g
```

```
284 GGAGTTTCTTCCTTCTGCGGGTTCGTGGTCTTGCTGGCTTCAGGAGTGAAGCTGCAGAC 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 GGAGTITCTICATICIGGIAGGITCGIGGICTCTCIGGCTTCAGGAATGAAGCTGTAGAA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ch 12.3%; Score 51.6; DB 4; Length 391; 1 Similarity 76.8%; Pred. No. 1.3e-07; 63; Conservative 0; Mismatches 19; Indels 0
Sequence 7956, Application US/09621976
; Patent No. 6639663
; Patent No. 6639663
; GENERAL INFORMATION:
; APPLICANT: Undert, S.
; APPLICANT: Undert, S.
; APPLICANT: Undert, S.
; APPLICANT: Undert, S.
; APPLICANT: Undert, S.
; TITLE OF INVENTION: ESTS and Encoded Human Proteins.
; TITLE OF INVENTION: ESTS and Encoded CONTROL APPLICATION NUMBER: US/09/621,976
; CURRENT FILING DATE: 2000-07-21
; SOFTWARE: Patent.pm
; SOFTWARE: Patent.pm
; SEQ ID NO 7956
; LENGTH: 3916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-621-976-8468/c

is Sequence 8468, Application US/09621976

patent No. 6639063

GENERAL INFORMATION:

APPLICANT: Dunas Milne Edwards, J.B.

APPLICANT: Glordano, J.Y.

APPLICANT: Glordano, J.Y.

TITLE OF INVENTION: ESTS and Encoded Human Proteins.

FILE REPRENCE: GENERT.054PR2

CURRENT APPLICATION NUMBER: US/09/621,976

CURRENT FILING DATE: 2000-07-21

NUMBER OF ESQ ID NOS: 19335

SEQ ID NO 8468

LENGTH: 466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 224 GircaAGGIGAGTGirACAACr 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63 CTCTGCGATGCTGTTATGAACT 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc_feature
) LOCATION: 306,313,315
OTHER INFORMATION: n=a, g, c or t
US-09-621-976-7956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
CRGANISM: Homo sapiens
US-09-621-976-8468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
```

```
Sequence 15076, Application US/09621976
Patent No. 6639063
GENERAL INFORMATION:
                                                                                                                                       224 GrrcdadGrdaGrgrandaaci 203
                                                                                                   63 CTCTGCGATGCTGTTATGAACT 84
 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 82.6%;
Matches 57; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 82.6%;
Matches 57; Conservative
 63; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          341 CTrérégre 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo sapiens
US-09-621-976-15059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ) ORGANISM: Homo sapiens
US-09-621-976-15076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64 TCTGCGATG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 10
US-09-621-976-15059/c
                                                                                                                                                                                                              US-09-621-976-15076/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                 a
                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                     ઠે
                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           284 ecalerricerretresereserreseresereseresereserreseses 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 GGAGTITCTICATICIGGIAGGIICGIGGICTCTCGGCTICAGGAATGAAGCTGTAGAA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 51.6; DB 4; Length 481;
Pred. No. 1.5e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12.3%; Score 51.6; DB 4; Length 481; 76.8%; Pred. No. 1.5e-07; Live 0; Mismatches 19; Indels
                      Length 466;
                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 8003, Application US/09621976
; Batent No. 6639063
; GENERAL INFORMATION
; APPLICANT: Jobert, S.
; APPLICANT: Jobert, S.
; APPLICANT: Glod-fano, J.Y.
; TILE REFERENCE: GENSET.054PR2
; CURRENT APPLICANT: US/09/621,976
; CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
; SEQ ID NO 8033
; SEQ ID NO 8033
                                                                                                                                                                                                                                                                                                                                    APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Jobert, S.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENSET.054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT PILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: PATENT PM
                  Query Match
12.3%; Score 51.6; DB 4;
Best Local Similarity 76.8%; Pred. No. 1.5e-07;
Matches 63; Conservative 0; Mismatches 19;
                                                                                                                                                                                                                                                                                    Sequence 8002, Application US/09621976
Patent No. 6639063
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  224 Gircaaggigagrgiracaaci 203
                                                                                                                                                                                                 224 GITCCAGGIGAGIGITACAACT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63 CICIGCGAIGCIGITAIGAACI 84
                                                                                                                                                           63 CTCTGCGATGCTGTTATGAACT 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          , OTHER INFORMATION: n=a, g, c or t
US-09-621-976-8003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12.3%;
76.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 76.5-
...hes 63; Conservative
                                                                                          3 GGAGTTTCTTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo sapiens
US-09-621-976-8002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc_feature
LOCATION: 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                     .09-621-976-8002/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-621-976-8003/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 8002
LENGTH: 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                          g
                                                                                                                                                             ઠે
                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        401 cagirricircricridargogriccredigercriccredictricagaargaagcraragacc 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               284 GGAGTITCTTCTTCGTCGTTCGTCGTCTTCCTCGCTTCAGGAGTGAAGCTGCAGAC 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4 GAGITICITCATICIGGIAGGITICGIGGICTCTGGGCTTCAGGAATGAAGCTGIAGAAC 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 49.8; DB 4; Length 468;
Pred. No. 6e-07;
0; Mismatches 12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 418;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12; Indels
  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15059, Application US/09621976

Patent No. 6639063

GENERAL INPORMATION:
APPLICANT: Underty S.
APPLICANT: Glockano, J.Y.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
TILE REFERENCE: GENSET. 054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 15059
LENGTH: 468
                                                                                                                                                                                                                                                                                                                             APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Jobert, S.
APPLICANT: Glordano, J.Y.
TITLE OF INVENTION: ESTE and Encoded Human Proteins.
FILE REFERENCE: GENSET: 054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 15076
LENGTH: 418
  19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 49.8; DB 4;
Pred. No. 5.6e-07;
0; Mismatches 12;
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           64 TCTGCGATG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

Mon Apr 26 09:48:38 2004

```
RESULT 15
US-09-621-976-10565/c
                                                                                                                                                                                                                                                                                                   SEC ID NO 4
LENGTH: 80246
                  RESULT 13
US-09-078-294-4/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 14
US-09-078-294-3/c
                                                                                                                                                                                                                                                                                                                                                                                        US-09-078-294-4
                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEC ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      384 GAGTITCTITCCTICTIGGIGGGTTCGTGGTCTCACTGACTTCAGGAATGAAACTGCAGACC 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4 GAGTITCTTCATTCTGGTAGGTTCGTGGTCTCTTCTGGCTTCAGGAATGAAGCTGTAGAAC 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
11.8%; Score 49.8; DB 4; Length 517;
Best Local Similarity 74.1%; Pred. No. 6.3e-07;
Matches 63; Conservative 0; Mismatches 22; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11.8%; Score 49.8; DB 4; Length 486; 82.5%; Pred. No. 6.1e-07; tive 0; Mismatches 12; Indels (
                                                                                                                                                                         APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Jobert, S.
APPLICANT: Glordano J.Y.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENSET: 054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILIG DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SOFTWARE: Patent.pm
LENTH: 486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Jobert, S. APPLICANT: Glordano, J.Y. TITLE OF INVENTION: ESTE and Encoded Human Proteins. FILE REFERENCE: GENSET.054PR2. CURRENT APPLICATION WUMBER: US/09/621,976
CURRENT PILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 10428
LENGTH: 517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  324 rrcagcárrgagrgrrracagcrcrc 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64 TCTGCGATGCTGTTATGAACTTCCC 88
                                                                                              US-09-621-976-14952/c
Sequence 14952, Application US/09621976
; Patent No. 6639063
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-621-976-10428/c
Sequence 10428, Application US/09621976
Patent No. 6639063
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Dumas Milne Edwards, J.B. APPLICANT: Jobert, S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc_feature
! COCATION: 119
- OTHER INFORMATION: n=a, g, c or t
08-09-621-976-14952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 82.6
Matches 57; Conservative
341 CTTGTGGTG 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                341 CTŤĠTĠTĠ 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64 TCTGCGATG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-621-976-10428
                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
```

```
59897 GAGTTTCTTCTGCTGGGGTTTGTGGTCTCACTGACTTCAGGAGTGAAGCTGCAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4 GAGTITCTTCATTCTGGTAGGTTCGTGGTCTCTCTGGCTTCAGGAATGAAGCTGTAGAAC 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 GAGTITCTTCATTCTGGTAGGTTCGTGGTCTCTCTGGCTTCAGGAATGAAGCTGTAGAAC 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 11.8%; Score 49.8; DB 3; Length 80595; Best Local Similarity 82.6%; Pred. No. 8.5e-06; Matches 57; Conservative 0; Mismatches 12; Indels 0; G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
11.8%; Score 49.8; DB 3; Length 80246;
Best Local Similarity 82.6%; Pred. No. 8.5e-06;
Matches 57; Conservative 0; Mismatches 12; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3, Application US/09078294
; Retent No. 6265211
; GENERAL INFORMATION:
APPLICANT: Choo, Kong-Hong Andy
APPLICANT: Choo, Kong-Hong Andy
APPLICANT: Cancilla, Michael R.
TITLE OF INVERTION: A NOVEL NUCLEIC ACID MOLECULE
FILE REFERENCE: Davies Col;
CURRENT APPLICATION NUMBER: US/09/078,294
; CURRENT FILING DATE: 1998-05-13
; NUMBER OF SEQ IN NOS: 29
; SOFTWARE: Patentin Ver. 2.0
                                                                                   APPLICANT: Choo, Kong-Hong Andy
APPLICANT: Choo, Kong-Hong Andy
APPLICANT: Du Sart, Deslaree
APPLICANT: Cancilla, Michael R.
ITILE OF INVENTION: A NOVEL NUCLEIC ACID MOLECULE
FILE REFERENCE: Davies Co.
CURRENT APPLICATION NUMBER: US/09/078,294
CURRENT FILING DATE: 1998-05-13
NUMBER OF SEQ ID NOS: 29
SOFTWARR: PATCHIN VET. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Nucleotide sequence of NC-contig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANISM: Nucleotide sequence of HC-contig
US-09-078-294-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 10565, Application US/09621976; Patent No. 6639063; CENERAL INFORMATION: APPLICANT: Dumas Milne Edwards, J.B.
Sequence 4, Application US/09078294; Patent No. 6265211; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   59604 TTCGCAGTG 59596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                59837 TrcccAGrc 59829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64 TCTGCGATG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64 TCTGCGATG 72
```

```
0; Gaps
                                                                                                                                                                                                                                                                                                                                              Query Match ... 11.2%; Score 47; DB 4; Length 443; Best Local Similarity 78.9%; Pred. No. 5e-06; Matches 56; Conservative 0; Mismatches 15; Indels
APPLICANT: Jobert, S.
APPLICANT: Glordano, J.Y.
ITILE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REPERENCE: GENEET. 054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 10565
LENGTH: 443
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAMPLKEY: misc_feature
LOCATION: 356
LOCATION: 356
LOCATION: 356
LOCATION: 356
LOCATION: 356
LOCATION: 356
LOCATION: 356
LOCATION: 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            225 ccrrcccagie 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62 ACTCTGCGATG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
```

0

Search completed: April 26, 2004, 02:11:09 Job time : 21.8853 secs

```
April 24, 2004, 23:47:42; Search time 111.862 Seconds (without alignments) 15988.422 Million cell updates/sec
                                                                                                                                                                                                                                 1 atggagtttcttcattctgg......ttctatgtcctttcagcgag 421
                                                                                                                                                                                                                                                                                                                                                                          6747726
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                    3373863 segs, 2124099041 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                           using sw model
                                                                                                                                                                                                                                                                           IDENTITY NUC Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N_Geneseq_29Jan04:*

1: geneseqn1980s:*

3: geneseqn1980s:*

4: geneseqn2001as:*

5: geneseqn2001as:*

6: geneseqn2001as:*

7: geneseqn2001as:*

8: geneseqn2003as:*

9: geneseqn2003as:*

10: geneseqn2003cs:*
                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                             US-10-051-835-16
                                                                         - nucleic search,
                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                  Title:
Perfect score:
                                                                                OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database :
                                                                                                                                                                                                                                                                                                                                       Searched:
                                                                                                                                                                                                                                          Sequence:
                                                                                                                      Run on:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	Acd42206 Human HLA	Ach32547 Human end	Aai93591 Human pol	'n	 00	4	Aas78088 DNA encod	0	_	œ	6 DNA en	6 Probe	m	Aba52210 Human foe	3 Human	6 Probe	Probe	2 Human	5 Probe	Aba31959 Probe #10	Aak25933 Human bon	Aak39006 Human bon	Aak13272 Human bra
SUMMARIES	ID	ACD42206	ACH32547	AA193591	AAS90405	AAH18588	AAS66944	AAS78088	AAS89070	AAS64261	AAC05498	AAS89076	AA119816	AA110563	ABA52210	ABA64843	AAI31816	AAI45011	ABA46962	ABA22015	ABA31959	AAK25933	AAK39006	AAK13272
	08	- 60	α	4	ß	4	ហ	ഗ	ហ	ເດ	ო	'n	4	4	4	4	4	4	4	4	4	4	4	4
	Length	421	481	415	587	2566	339	648	648	648	380	1173	465	465	465	465	465	465	465	465	465	465	465	465
	% Query Match	100.0	œ	m	13.4	13.4	13.4	13.4	13.4	13.4	13.1	13.1	13.0	13.0	13.0	13.0		13.0		13.0			13.0	13.0
	Score	421	160	141	56.6	56.6	56.4	56.4	56.4	56.4	55	55	54.8	54.8	4.0	54.8	54.8	54.8	54.8	54.8			54.8	54.8
	Result No.	 	10	m	4	ഹ	9	7		0	0.	17	0 15	c 13		0 15	-	-	18	-	ı N	10	22	~

LO	• •	CV.	Aai00495 Probe #48	Aai05532 Probe #55	Abs13090 Human gen	Abs00516 Human gen	Н	_	'n	_	Н	Н	Aas64807 DNA encod	Abq80552 Human Can	Aah17215 Human cDN	Acf62737 Cancer ba	Adb20852 MRP1 base	Adb87941 Human UGT	Adb96924 Human MDR	Adhealls Human MDR		Aci62750 Cancer Da
AAK00486	ABS38593	ABS25522	AAI 00495	AAI05532	ABS13090	ABS00516	AAS80270	AAS64258	AAS72945	AAS91453	AAS75340	AAS75103	AAS64807	AB080552	AAH17215	ACF62737	ADB20852	ADB87941	ADB96924	31100004	CTTOCOM	ACF62750
	•#	***	ın	ın	ın	ູເດ	ın	ın	ın	ın	ın	'n	ហ	9	4	7	_	. ტ	. 0	٠.	n	7
465	465	465	465	465	465	465	2943	558	1227	552	1089	1089	1328	237961		œ	68355	68355	68355		0000	186591
0	0	0	0	0	0	0	0	0	o	00	ω	00	α	α	-	٠				٠,	0	9.
13.	13.0	13	2			5	2	12	12	12	12	12.8	2	2	12.7	12	10	10	5	•	7	12
54.8	54.8	4	4	4. 4.	ι ι. 4	4.4		54.2		4	4	4	4.	, c	53.4	. ~	7	7 6) (1)	3 2	20	53
4	ď	4		α	0	, 5	2 =	2	ا ا ا	4	2	9	2 5	ά	0			10		7 :	4	45
Ü	ינ	ינ	ינ	ינ		ינ	, (*)	, (¶	ť)	נ)	. 0	, (*	, 4	. 4	. •	•		•	,

ALIGNMENTS

Human; 88; DNA methylation; cancer; colon cancer. Human HLA class I region cDNA Incyte 428822.1. ACD42206 standard; cDNA; 421 BP. Karpf AR; 19-MAR-2001; 2001US-0277380P. 07-MAR-2002; 2002US-00093766 (first entry) Lasek AKW, Jones DA, (LASE/) LASEK A K W. (JONE/) JONES D A. (KARP/) KARPF A R. WPI; 2003-503249/47. US2003013099-A1. Homo sapiens. 16-JAN-2003. 05-SEP-2003 ACD42206;

New combination comprising cDNAs that are expressed in a disorder or process associated with DNA methylation, useful for diagnosing, staging, treating or monitoring treatment of cancer, e.g. colon cancer.

Claim 2; Page 23; 66pp; English

The invention relates to a combination comprising cDNAs which are expressed in a disorder or process associated with DNA methylation. The combination and cDNAs are useful for diagnosing, treating or monitoring treatment of cancer, e.g. colon cancer and for detecting changes in expression of genes encoding proteins that are associated with DNA methylation. The protein is useful for screening molecules or compounds to identify at least one ligand that binds to the protein and for producing an antibody. The present sequence represents a cDNA expressed in a disorder or process associated with DNA methylation

```
240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polynucleotide sequences obtained from various cDNA libraries, useful
                                                                                                ô
                                                                                                                                                                                                                                                                                                                                         121 ANTAAGAGCAGTATCTTTGGAGATTGGAGAGCTCCACCAAGGATGCCCACTGGCTCCCTAC 180
                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; ss; sequencing by hybridisation; SBH; expressed sequence tag; EST; genome mapping; biodiversity; genetic disorder.
                                                                                                                                                                                                                                                                                       61 AACTCTGCGATGCTGTTATGAACTTCCCTTAGAATCAACCCATTTGTGAAACACCCACTT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 GTGAAGACATCATCTTTCTTTGAGATCTTCCTTGCTTTCTGGCCAAGAAGTTATTC 300
                                                                                                                                                                                                                                             61 AACTCTGCGATGCTGTTATGAACTTCCCTTAGAATCAACCCATTTGTGAAACACCACATT 120
                                                                                                                                                  9
                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                           AAAGTTTTTTTATGTGAGGACTCGGTCTCAGATATGGCTACTGGGATTCTGTTCAAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAAGACATCATCTTTCTTTGAGATCTTCCTTGCTTTCTGGCCAAAGAAGTTATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTGACCCGACTTTCCAAAGAGTACTAGTTCCTTTTTAGCAGTGATTAGAAACCTGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTACTACTGTGTGCTTGTGACTAGTGTGGTTTTATTGTTTCTATGTCCTTTCAGCGA
                                                                                                                                                                                              1 Arecacitriciticalitoridana estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci estroci e
                                                                                                                                               1 ATGGAGTTTCTTCATTCTGGTAGGTTCGTGGTCTCTCTGGCTTCAGGAATGAAGCTGTAG
                                                                                                   Gaps
                                                                                                   ó
                                                      Length 421;
                                                                                                0; Indels
Sequence 421 BP; 99 A; 87 C; 93 G; 142 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dickson MC,
                                                 100.0%; Score 421; DB 8; Lilarity 100.0%; Pred. No. 2.1e-122; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Stache-Crain B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human endothelial cell cDNA #680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACH32547 standard; cDNA; 481 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JUL-2001; 2001US-00918995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JUL-2001; 2001US-00918995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LABAT I.
STACHE-CRAIN B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Labat I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JONES L W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DRMANAC R T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-615964/58
                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003073623-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            G 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         G 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-APR-2003.
                                                                                                     421;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACH32547;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (DRMA/)
(LABA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (STAC/)
(DICK/)
(JONE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Drmanac
                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACH32547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
       S
                                                                                                                                                                                            셤
                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                  Д
                                                                                                                                                                                                                                                                                                                                 ያ ዓ
                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

```
The invention relates to an isolated polymucleotide comprising any one of 3843 cDNA sequences, appearing as ACH12789-ACH50831, whose sequence was determined by the technique of SBH (sequencing by hybridisation). Also included is a purified polypeptide comprising a sequence corresponding to a reading frame of the novel polymucleotide. The nucleic acid sequences are useful in diagnostics as expressed sequence tags (EST) for corresponding to information, in assessing biodiversities, or in identifying mutations or responsible for genetic disorders and other traits. The nucleotide corresponding to the composome and gene mapping, in the recombinant production of correction, or in generating antisense DNA or RNA. The purified polypeptide is useful for generating antisense DNA or RNA. The purified polypeptide is useful for generating antisense DNA or RNA. The present sequence for this patent did not form part of the printed specification, but was contain an information of the printed specification, but was contain an information of the printed specification, but was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           179 TGGAGATTGGAGAGTCCACCAAGGATGCCCACTGGCTCCCTACAAAGCTTTTTATGTGAG 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      138 IGGAGATIGGAGAGICCACCAAGGATGCCCACTGGCTCCCTACAAAGTTTTTATGTGAG 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human, cytokine; cell proliferation, cell differentiation, gene therapy, vaccine, peptide therapy, stem cell growth factor, haematopoiesis; tissue growth factor, immunomodulatory; cancer; leukaemia; nervous system disorders; arthritis; inflammation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              redreestriccrestricacriticascariaasiscasceses de consideration
as hybridization probes, as oligomers for PCR, for chromosome and gene
mapping, in the recombinant production of protein, or in generating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGAACTTCCCTTAGAATCAACCCATTTGTGAAACACCACATTAATAAGAGCAGTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       119 ACGAACTICCCTIAGAAICAACCCAITICIGAAACACCACAITACIAAGAGCAGAAICII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGTAGGTTCGTGTCTCTCGCCTTCAGGAATGAAGCTGTAGAACTCTGCGATGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 8; Length 481;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 481 BP; 138 A; 93 C; 121 G; 126 T; 0 U; 3 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                    obtained in electronic format directly from USPTO at segdata.uspto.gov/sequence.html?DocID=20030073623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
38.0%; Score 160; DB 8,
Best Local Similarity 89.6%; Pred, No. 5e-40;
Matches 172; Conservative 0; Mismatches 2
                                                                                    Claim 1; SEQ ID NO 19759; 44pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human polynucleotide SEQ ID NO 13651.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AA193591 standard; cDNA; 415.BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-FEB-2001; 2001WO-US004927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-FEB-2000; 2000US-00515126.
18-MAY-2000; 2000US-00577409.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACTCGGTCTCA 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACTCGCTCTCA 250
                            mapping, in the recom
antisense DNA or RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200164835-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAI93591;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       n
O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAI 9359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ਨੇ
```

```
The invention relates to isolated polymucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PRN primers, oligomers, and for chomosome and gene mapping, and in recombinant production of (II). The polymucleotides are also used in diagnostics as expressed sequence tags for identifying expressed cerivity of (II) as useful in gene therapy techniques to restore normal cerivity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful for treating disorders of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polymucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and and an oaid sequences. Ass64197-AAS94564 represent novel human diagnostic coding sequences. Ass64197-AAS94564 represent novel human diagnostic coding sequences. Ass64197-AAS94564 represent novel human diagnostic coding sequences. Asseate from the printed specification, but was obtained in electronic format directly from MIPO at Everynness
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 recaertrerrentes reconstructions and reconstructions and reconstructions are reconstructed and reconstructions are reconstructed as a reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of the reconstruction of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; DB 5; Length 587; 2.3e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 587 BP; 152 A; 122 C; 169 G; 144 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Score 56.6; DE; Pred. No. 2.3e-0; Mismatches
                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 26209; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human cDNA sequence SEQ ID NO:18776.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAH18588 standard; cDNA; 2566 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-Aug-1999; 99UP-00300253.
11-JAN-2000; 2000JP-00118776.
02-MAY-2000; 2000JP-00183767.
09-JUN-2000; 2000JP-00241899.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13.4%;
87.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-JUL-2000; 2000EP-00116126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-JUN-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 87.3
hes 62; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            536 CCTTCGTGGTG 546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62 ACTCTGCGATG 72
WFI; 2001-639362/73.
P-PSDB; ABG26218.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              39-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EP1074617-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAH18588;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to human polymuclectides (AAI79941-AAI83841) and the encoded proteins (AA000010-AA013910) that exhibit activity elating to cytokine, cell proliferation or cell differentiation or which may induce production of other cytokines in other cell populations. The polymorphides are useful in gene therapy, vaccines or peptide therapy. The polypeptides have various cytokine-like activities, e.g. stem cell growth factor activity, haematopoiesis regulating activity, tissue growth factor activity, immunomodulatory activity and activity, tissue growth factor activity, immunomodulatory activity and activin/inhibin activity and may be useful in the diagnosis and/or treatment of cancer, leukaemia, nervous system disorders, arthritis and inflammation. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Isolated nucleic acids and polypeptides, useful for preventing diagnosing and treating e.g. leukemia, inflammation and immune disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 70 ATGCTGTTATGAACTTCCCTTAGAATCAACCCATTTGTGAAACACCACATTAATAAGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       130 AGTATCTTTGGAGATTGGAGAGTCCACCAAGGATGCCCCACTGGCTCCTACAAAGTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human, chromosome mapping; gene mapping; gene therapy; forensic;
food supplement; medical imaging; diagnostic; genetic disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 13651; 1399pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     33.5%; Score 141; DB 4; Length 415; 100.0%; Pred. No. 4.6e-34; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 415 BP; 109 A; 99 C; 96 G; 110 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA encoding novel human diagnostic protein #26209.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rardradadacredarcread 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAS90405 standard; cDNA; 587 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tang YT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-MAR-2001; 2001WO-US008631.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAR-2000; 2000US-00540217.
23-AUG-2000; 2000US-00649167.
                                                                            rang YT, Liu C, Drmanac RT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 33.5
Best Local Similarity 100.
Matches 141; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Liu C,
                                                                                                                                                WPI; 2001-514838/56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (HYSE-) HYSEQ INC
   (HYSE-) HYSEQ INC
                                                                                                                                                                                  P-PSDB; AA013660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200175067-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Drmanac RT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . 061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAS90405;
```

g ઠે RESULT

ò

61

Gaps

. 0

9; Indels

```
The present invention describes primer sets for synthesising 5602 full-
length cDMsa defined in the specification. Where a primer set comprises:

(a) an oligo-dr primer and an oligonucleotide complementary to the complementary strand of a polynucleotide which comprises one of the 5602 oligonucleotide comprising a sequence complementary to the complementary strand of a polynucleotide somplementary to the comprising a sequence complementary to the complementary strand of a polynucleotide which comprises a 5'-end polynucleotide which comprises a 5'-end polynucleotide which comprises a 3'-end sequence complementary to a polynucleotide comprises a si-end sequence complementary to a polynucleotide comprises a 1'-end sequence.

Complementary strand of a polynucleotide which comprises a 5'-end polynucleotide which comprises a 1'-end sequence complementary to a polynucleotide comprises a 1'-end sequence is selected from those defined in the specification. The primer sets can be used in antisense therapy and in specification. The primer sets can be used in antisense therapy and in the specification and/or diagnosis of the primers are also useful for the detection and/or diagnosis of the abcormality of the proteins encoded by the full-length cDMAs. The primers are also useful for the detection and/or diagnosis of the primers are also useful for the CMAB92145 to AAH13633 to AAH13633 to AAH13633 to AAH18632 to present cligonucleotides, all of which are used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Primer sets for synthesizing polymucleotides, particularly the 5602 full-length cDNAs defined in the specification, and for the detection and/or diagnosis of the abnormality of the proteins encoded by the full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder; ss.
                                          hikawa T, Hayashi K, Saito K, Yamamoto J;
Wakamatsu A, Nagai K, Otsuki T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
13.4%; Score 56.6; DB 4; Length 2566;
Best Local Similarity 87.3%; Pred. No. 4.3e-07;
Matches 62; Conservative 0; Mismatches 9; Indels 0;
                                                                                                                                                                                                                                                                         Claim 8; SEQ ID NO 18776; 2537pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2566 BP; 512 A; 568 C; 843 G; 643 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA encoding novel human diagnostic protein #2748.
                                     sogai T, Nishikawa T,
Sugiyama T, Wakamatsu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAS66944 standard; cDNA; 339 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-MAR-2001; 2001WO-US008631.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1184 CCTTTGCAGTG 1194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62 ACTCTGCGATG 72
(HELI-) HELIX RES INST.
                                                                                                             WPI; 2001-318749/34.
                                            Isogai T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200175067-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAS66944;
                                                                Ishii S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAS66944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
```

```
The invention relates to isolated polymucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polymucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in game therapy techniques to restore normal cativity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food uspipement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polymucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess blodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic coding sequences of the invention. Note: The sequence data for this electronic format directly from WIPO at the printed specification, but was obtained in electronic format directly from WIPO at the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   86 TGGAGTTTCTTCTTCTTCTGGTGGGTTCGTGGTCTCGCTGGCTTTAGGAGTGAAGCTGCAGA 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 TGGAGTITCTTCATTCTGGTAGGTTCGTGGTCTCTCTGGCTTCAGGAATGAAGCTGTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, chromosome mapping, gene mapping, gene therapy, forensic, food supplement, medical imaging, diagnostic, genetic disorder; ss.
                                                                                                                                                                                                                  New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13.4%; Score 56.4; DB 5; Length 339; 85.1%; Pred. No. 2.1e-07; tive 0; Mismatches 11; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 339 BP; 45 A; 94 C; 120 G; 80 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA encoding novel human diagnostic protein #13892.
                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 2748; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAS78088 standard; cDNA; 648 BP.
31-MAR-2000; 2000US-00540217.
23-AUG-2000; 2000US-00649167.
                                                                                                            Tang YT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                146 CCTTTGCGACTCAG 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62 ACTCTGCGATGCTG 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                63; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                            Drmanac RT, Liu C,
                                                                                                                                                      WPI; 2001-639362/73.
                                                             (HYSE-) HYSEQ INC.
                                                                                                                                                                             P-PSDB; ABG02757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200175067-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAS78088;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
```

ò

61

0; Gaps

. 61

11-OCT-2001.

```
The invention relates to isolated polymucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PKT) primers, oligomers, and for chomosome and gene mapping, and in recombinant production of (II). The polymuclectides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal curivity of (II) as useful in gene therapy techniques to restore normal useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful for treating disorders of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polymucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations in chaptonic orher types of data and products dependent on DNA and amino acid sequences. Ass64197-A854564 represent novel human diagnostic coding sequences. Ass64197-A854564 represent novel human diagnostic coding sequences. Ass64197-A854564 represent novel human diagnostic coding sequences. Ass64197-A854564 represent novel human diagnostic coding sequences of the invention. Note: The sequence data for this electronic format directly from MIPO at the printed specification, but was obtained in the type of pate and products dependent on the format directly from MIPO at format directly from MIPO at the sequences.
                                                                                                                                                                                                                                                                                                           New isolated polynuclectide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 648 BP; 126 A; 171 C; 212 G; 139 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 13892; 103pp; English.
30-MAR-2001; 2001WO-US008631.
                                                31-MAR-2000; 2000US-00540217.
23-AUG-2000; 2000US-00649167.
                                                                                                                                                                                       Tang
                                                                                                                                                                                    Drmanac RT, Liu C,
                                                                                                                                                                                                                                    WPI; 2001-639362/73.
P-PSDB; ABG13901.
                                                                                                                                 (HYSE-) HYSEQ INC.
```

```
87 GGAGTITCTTCTTCTGGTGGGTTCTGGTCTTCGCTGGCTTCAGGAGTGAAGCTTCAGAC 146
                                                                                             3 GGAGITICITCATICIGGIAGGITCGIGGICTCTCTGGCTTCAGGAATGAAGCTGTAGAA 62
                                                   0; Gaps
Query Match
Best Local Similarity 80.5%; Pred. No. 2.7e-07;
Matches 66; Conservative 0; Mismatches 16; Indels (
                                                                                                                                                                                                                                        147 crrrecesreagrifracacci 168
                                                                                                                                                                                           63 CTCTGCGATGCTGTTATGAACT 84
                                                                                                                                            g
                                                                                                                                                                                                                                     ద
                                                                                                                                                                                              ò
```

62

```
AAS89070 standard; cDNA; 648 BP
        AAS89070;
```

DNA encoding novel human diagnostic protein #24874. 13-FEB-2002 (first entry)

Human, chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder; ss.

Homo sapiens

WO200175067-A2

```
The invention relates to isolated polymuclectide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCN) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polymucleotides are also used in diagnostics as expressed sequence tags for identifying expressed cartivity of (II) is useful in gene therapy techniques to restore normal cartivity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful for treating disorders of sites expression of biological activity. The polypeptide and polymucleotide sequences have applications in disorders or polypeptide and polymucleotide sequences have applications in diagnostics. Forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity responsible for genetic disorders or other traits to assess biodiversity responsible for genetic disorders or other traits to assess biodiversity responsible for genetic disorders or other traits to assess biodiversity responsible for genetic disorders or other traits to assess biodiversity conducts sequences and sequences. AAS64197 AAS94564 represent novel human diagnostic coding sequences. AAS64197 AAS94564 represent novel human diagnostic coding sequences of the invention. Note: The sequence data for this electronic format directly from WIPO at the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 87 deláriticircircideradericerdercicecidecircladaroradericadar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 GGAGITICITCATCTGGTAGGITCGTGGTCTCTGGGCTTTCAGGAATGAAGCTGTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                              New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 80.5%; Pred. No. 2.7e-07;
Matches 66; Conservative 0; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 648 BP; 126 A; 171 C; 212 G; 139 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 24874; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                147 crridcegrandrirracacci 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            63 CTCTGCGATGCTGTTATGAACT 84
                                                                                                                                                                                                                             Tang YT;
                                          30-MAR-2001; 2001WO-US008631.
                                                                                             31-MAR-2000; 2000US-00540217.
23-AUG-2000; 2000US-00649167.
                                                                                                                                                                                                                                                                                WPI; 2001-639362/73
P-PSDB; ABG24883.
                                                                                                                                                                                                                             Drmanac RT, Liu C,
                                                                                                                                                                                (HYSE-) HYSEQ INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 9
AAS64261
%$GGGGGGGGGGGGGGGGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
```

DNA encoding novel human diagnostic protein #65. (first entry) 13-FEB-2002 # S X X X E X E X E X X X X

AAS64261 standard; cDNA; 648 BP

AAS64261;

Human, chromosome mapping, gene mapping, gene therapy, forensic; food supplement, medical imaging, diagnostic, genetic disorder; ss

Homo sapiens

Homo sapiens.

```
The present sequence is one of a large number of 5' ESTs derived from CC mRNAs encoding secreted proteins. No ORF has yet been conclusively conclusively to the MRNA encoding secreted proteins. No ORF has yet been conclusively conclusively to total human RNAs or polyA+ RNAs derived from 30 different tissues. EST sequences usually correspond mainly to the 3' untranslated region (UTR) of the mRNA because they are often obtained from oligo-dT primed cDNA cof libraries. Such ESTs are not well suited for isolating cDNA sequences have been obtained, the full 5' UTR is rarely included. 5' CC ESTs are derived from mRNAs with intext 5' ends and can therefore be used to obtain full length mDNAs and genomic DNAs. S' ESTs are also used in client and secretion upstream regulatory sequences and to design cypression and secretion vectors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGTAGGTTCGTGTCTCTGGCTTCAGGAATGAAGCTGTAGA
                                                                                                                                                                                                                                                                                                                                                           New nucleic acid that is a 5' expressed sequence tag (5' EST) for obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for diagnostic, forensic, gene therapy and chromosome mapping procedures.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, chromosome mapping, gene mapping, gene therapy, forensic, food supplement, medical imaging, diagnostic, genetic disorder; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13.1%; Score 55; DB 3; Length 380; 85.9%; Pred. No. 6.1e-07; ive 0; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 9573; 71pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 380 BP; 107 A; 107 C; 80 G; 84 T; 0 U; 2 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA encoding novel human diagnostic protein #24880.
                                                                                                                                                                                                                                                                         Giordano J;
                                                                                                                                                                                                                                                                         Duclert A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAS89076 standard; cDNA; 1173 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-MAR-2001; 2001WO-US008631.
                                                                                                                                   21-FEB-2000; 2000EP-00200610.
                                                                                                                                                                                99US-0122487P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 85.9
Matches 61; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            122 cérredècere 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 TGGAGTTTCTTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62 ACTCTGCGATG 72
                                                                                                                                                                                                                                                                         Dumas Milne Edwards J,
                                                                                                                                                                                                                                                                                                                    WPI; 2000-500381/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200175067-A2
                                                                                                                                                                                                                             (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                            EP1033401-A2
                                                                                                                                                                                26-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-OCT-2001.
                                                                                         06-SEP-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAS89076;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAS89076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to isolated polymucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PGN) primers, oligomers, and for chomosome and gene mapping, and in recombinant production of (II). The polymuclectides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal crivity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polymucleotide sequences have applications in diagnostics forensics, gene mapping, identification of mutations and to produce other types of data and products dependent on DNA and and to produce other types of data and products dependent on DNA and and the contains and the contains and the contains and the contains and the contains and produce other types of data and products dependent on DNA and and the contains are set as AAS64157-AAS94564 represent novel human diagnostic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 GGAGTTTCTTCATTCTGGTAGGTTCGTGGTCTCTCGGCTTCAGGAATGAAGCTGTAGAA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation; gene therapy; chromosome mapping; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      coding sequences of the invention. Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                   New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13.4%; Score 56.4; DB 5; Length 648; 80.5%; Pred. No. 2.7e-07; cive 0; Mismatches 16; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 648 BP; 126 A; 171 C; 212 G; 139 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human secreted protein 5' EST, SEQ ID NO: 9573.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 65; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       147 cirrácicacicacrirracaci 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63 CICTGCGATGCTGTTATGAACT 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAC05498 standard; cDNA; 380 BP
                                                                                              30-MAR-2001; 2001WO-US008631
                                                                                                                                        31-MAR-2000; 2000US-00540217.
23-AUG-2000; 2000US-00649167.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-OCT-2000 (first entry)
                                                                                                                                                                                                                                                             Tang
                                                                                                                                                                                                                                                                                                     WPI; 2001-639362/73.
P-PSDB; ABG00074.
                                                                                                                                                                                                                                                          Drmanac RT, Liu C,
                                                                                                                                                                                                              (HYSE-) HYSEQ INC.
    WO200175067-A2
                                                 11-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAC05498;
```

g Š d

ò

ò

Gaps

ö

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to isolated polymucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain sequences. (I) is useful as hybridisation probes, polymerase chain and in recombinant production of (II). The polymucleotides are also used in diagnostics as expressed sequence tags for identifying expressed cerivity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of stres expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polymucleotide sequences have applications in dispublic for genetic disorders or other traits to assess biodiversity and to produce other types of dear and products dependent on DNA and confine acid sequences. AASéAtjorAAS94564 represent now but and an entire confine acid sequences of the invention when the acid to produce other types of dear and products dependent on DNA and confine acid sequences. AASéAtjorAAS94564 represent nowel human diagnostic confine acid sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 TGGAGTTTCTTCATTCTGGTAGGTTCGTGGTCTCTGGCTTCAGGAATGAAGCTGTAGA 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               coding sequences of the invention. Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from MIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Probe #9749 for gene expression analysis in human cervical cell sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Probe; human; microarray; gene expression; cervical epithelial cell;
                                                                                                                                        New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13.1%; Score 55; DB 5; Length 1173; 85.9%; Pred; No. 9.8e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1173 BP; 204 A; 342 C; 376 G; 251 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches 10; Indels
                                                                                                                                                                                                           Claim 1; SEQ ID NO 24880; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAI19816 standard; DNA; 465 BP.
31-MAR-2000; 2000US-00540217.
23-AUG-2000; 2000US-00649167.
                                                                      Tang YT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-OCT-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 85.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         230 cchrododric 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62 ACTCTGCGATG 72
                                                                   Drmanac RT, Liu C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cervical cancer; ss.
                                                                                                WPI; 2001-639362/73
                                       (HYSE-) HYSEQ INC.
                                                                                                               P-PSDB; ABG24889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200157278-A2
                                                                                                                                                                                  biodiversity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAI19816;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                X D X B X S X M X B X B X B X Y X Y X B
 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human cervical epithelial cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       403 GGAGTTTCTTCCTTCTGGTGGGTTCGTGGTCTGGATGGCTTCAGGAGTGAAGCTGCAGAC 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention relates to human single exon nucleic acid probes (SENP). The present sequence is one such probe. The SENPs are derived from human Hela cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Probe #496 for gene expression analysis in human cervical cell sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 GGAGTITCTTCATTCTGGTAGGTTCGTGGTCTCTCGGCTTCAGGAATGAAGCTGTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Probe; human; microarray; gene expression; cervical epithelial cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Match 13.0%; Score 54.8; DB 4; Length 465; Local Similarity 79.3%; Pred. No. 7.6e-07; Les 65; Conservative 0; Mismatches 17; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 465 BP; 121 A; 129 C; 114 G; 101 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 25; SEQ ID NO 9749; 487pp; English.
                                                                                                                                                                                                                                                                                                                                                                                         Penn SG, Hanzel DK, Chen W, Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       343 CÍTTGCGGTGAATGÍTACÁÁCÍ 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63 CTCTGCGATGCTGTTATGAACT 84
                                                                                         26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-0033468P.
21-SEP-2000; 2000US-023468PP.
27-SEP-2000; 2000US-023463PP.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                            (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US-0207456P.
2000US-00608408.
2000US-00632366.
2000US-0234687P.
30-JAN-2001; 2001WO-US000670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001; 2001WO-US000670.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-FEB-2000; 2000US-0180312P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAI10563 standard; DNA; 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-OCT-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-488901/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cervical cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200157278-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAI10563;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAI10563/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 13
```

```
The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a single exon nucleic acid probe of the invention. Note: The sequence data for this parent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
            Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human fetal liver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human fetal liver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human, foetal liver; gene expression; single exon nucleic acid probe; ss.
                                                                                                                                                                                                                                                                                                                                               3 GGAGTITICITICALICIGGIAGGITICGIGGICITCIGGCITICAGGAAIGAAGCIGIAGAA
                                                                                                                                                                                                                                                                                                                                                                               403 GGAGTTTCTTCCTTCTGGTGGGTTCGTGGTCTGGATGGCTTCAGGAGTGAAGCTGCAGAA
                                                                                                                                                                                                                                                                              13.0%; Score 54.8; DB 4; Length 465; 79.3%; Pred. No. 7.6e-07; tive 0; Mismatches 17; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 4; SEQ ID NO 13148; 639pp + Sequence Listing; English.
                                                                                                                                                                                                                                              Sequence 465 BP; 121 A; 129 C; 114 G; 101 T; 0 U; 0 Other;
                                                               Claim 1; SEQ ID NO 515; 639pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human foetal liver single exon nucleic acid probe #13148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rank
                                                                                                                                                                                                                                                                                                                                                                                                                                               343 ciridecericarerracaacr 322
                                                                                                                                                                                                                                                                                                                                                                                                                 63 CTCTGCGATGCTGTTATGAACT 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-SEP-2000; 2000US-0236359P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001; 2001WO-US000669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-FEB-2000; 2000US-0180312P.
26-MAY-2000; 2000US-0207456P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000US-00608408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-AUG-2000; 2000US-00632366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-SEP-2000; 2000US-0234687P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABA64843 standard, DNA; 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DΚ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-483447/52.
                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 65; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hanzel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200157277-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABA64843;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 15
ABA64843/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                 Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human cervical epithelial cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAGTITCTTCCTTCTGGTGGGTTCGTGGATGGATGAGGTGAAGGTGAAGCTGCAGAC
                                                                                                                                                                                                                            The present invention relates to human single exon nucleic acid probes (SENP). The present sequence is one such probe. The SENPs are derived from human Hela cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; foetal liver; gene expression; single exon nucleic acid probe; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 GGAGTITCTTCATICTGGTAGGTTCGTGGTCTCTGGCTTCAGGAATGAAGCTGTAGAA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gabs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
13.0%; Score 54.8; DB 4; Length 465;
Best Local Similarity 79.3%; Pred. No. 7.6e-07;
Matches 65; Conservative 0; Mismatches 17; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 465 BP; 121 A; 129 C; 114 G; 101 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human foetal liver single exon nucleic acid probe #515.
                                                                                                                                                                                                 Claim 25; SEQ ID NO 496; 487pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rank DR;
                                                                                   Rank DR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CICIGCGAIGCIGITAIGAACT 84
                                                 (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MOLE-) MOLECULAR DYNAMICS INC
                                                                                 Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-FEB-12-26-MAY-2000; 2000US-UZU: 130-UUN-2000; 2000US-00608408.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-SEP-2000; 2000US-0236359P. 04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-FEB-2000; 2000US-0180312P.
27-SEP-2000; 2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001; 2001WO-US000669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABA52210 standard; DNA; 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hanzel DK,
                                                                                 Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-483447/52
                                                                                                                 WPI; 2001-488901/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200157277-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-AUG-2001,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABA52210;
                                                                               Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABA52210,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     &
```

띥

344

62

Gaps . 0

```
CC present sequence is a single exon nucleic acid probe of the invention.

CC Note: The sequence data for this patent did not form part of the printed CC specification, but was obtained in electronic format directly from WIPO CC at ftp.wipo.int/pub/lished_pct_sequences

XX

SQ Sequence 465 BP; 121 A; 129 C; 114 G; 101 T; 0 U; 0 Other;

Query Match

Best Local Similarity 79:3%; Pred. No. 76e-07; Indels 0; Gaps 0;

Matches 65; Conservative 0; Mismatches 17; Indels 0; Gaps
```

 Qy
 3 GGAGTTTCTTCATTCTGGTAGGTTCGTGGTCTCTCTGGCTTCAGGAATGAAGCTGTAGAA
 6.2

 bb
 403 GAGTTTCTTCTTCTTGTGGTGTCTTGATGGTTCAGGAGTGAAGCTGCAGAC
 344

 Cy
 63 CTTGCGATGCTGTTATGAACT
 84

 Db
 343 CTTTGCGGTGAATGTTATGAACT
 322

Search completed: April 25, 2004, 08:46:06 Job time: 114.862 secs

```
GenCôre version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
```

OM nucleic - nu	OM nucleic - nucleic search, using sw model
Run on:	April 24, 2004, 23:54:27; Search time 1108.58 Seconds (without alignments) 16460.143 Million cell updates/sec
Title: Perfect score: Sequence:	US-10-051-835-16 421 1 atggagtttetteattetggttetatgteettteagggag 421
Scoring table:	IDENTITY NUC Gapop 10-0 , Gapext 1.0
Searched:	3470272 segs, 21671516995 residues
Total number of	Total number of hits satisfying chosen parameters: 6940544
Minimum DB seq Maximum DB seq	Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries em_htgo_hum:* em_htgo_mus:* em_htgo_other:* GenEmbl:* Database :

Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

				ф			SOLUMENT	
	Re	Result No.	Ö	t e	Lengt.	_	ΩI	riptio
	iυ		7.	(4	193829	١٥		012154 Hom
	יט	N 1	17	51.7	82	OI C	AC020639	Ношо
)	า 🔻	, a	rr	9 0	ס מ	ACUZ1829	HOHOL
٠		· w		חו	436	י ס	AC016572	Ношо
	υ	y	œ.	ന	460	δ	AC091874	Ношо
	U	۲.	۲.	സ	94	00	AC025306	Homo
		20 0		יו נד	4. c	אנ	AC092963	HOHO
		10	: .:	വസ	789	4 (4	AC023222	Homo
		11	7	ന	792	σ	CNSO1DS6	BAC
		12	7	m	041	σ	AL133383	Humar
		13	57	ന	756	σ (AC006456	Ношо
		4 t	57	ო	2.5	N	AC140889	Ношо
	υ	۲ ۲ د ۲	າູ	ກຕ	4. 8. c	7 V	AC147084	Pan t
		2 5		ጉጥ	2000	ט ע	A015051	שליים סייות
		\ C	ی د	າຕ	2 6	σ	AK024309	HOHOL
	υ	13		സ	3687	ν σν	BC041827	Ношо
	υ	50	6	m	53	0	AC092300	Homo
	υ	21	ė.	ന	76	σ	AL441927	Humar
		22	ġ.	m	8	σ	AC007038	Ношо
		23	ė.	m	046	σ	4	Ношо
		24	56.6	ო	110000	CV (BX546444_08	noi
		52	٠,	m	202	on e	AC121160	Ношо
	•	9 5	٠,	nι	2 5	ח כ	AC125287	НОШО
	ນ	\ c	o u	ባෆ	101	40	AC084483	
	U	0 0		7 (*	9 6	, C	AC004046	HOMO
	•	30	Ġ	າຕ	0.0	ı σ	AL365265	Humar
	บ	31	6	m	309	0	AL390719	Humar
	υ	32	ė	щ.	310	ov	HSDJ92C8	Humar
		33	ė.	13.4	471	σ	AC136469	Нопо
		34	Ġ	m.	496	N ·	AC034128	Ношо
	•	3 5	٠,		יי היי	J	AL15/387	Humar
	υ	9 5	٠,		ָ סנס סנס	א כ	AL136094	Human
_	(` a	0 u	1 ~	ט ת ט כ	N 0	ACCO2451	
_	י כ	ם ה	· u	1 r	יע מיי	n a	10000 C	
	נ	, 4 , C		1 ~	0 4	nσ	ACC10343	
		, 4 5 L		· ~	710	, (AL591642	HOMO
	U	. 4	ی د		3 6	10	AC093898	Homos
	U	4.5			971	σ	AC087651	Homos
	O	4	6	m	973	· (1	AC024725	Homo s
)	45		m	107	ı on	AC007450	AC007450 Homo sapi
• • • •							ALIGNMENTS	
***	RE	RESULT 1	Ţ					
	ξ		ָה ק	12154			193829 bg dd	11 DRI 28-111N-2002
	DEI	FINITION		Homo sapie	ns 3	BAC R	-48H24 (Rosw	r Institu
	ì			Libra	7	plet	e sequence.	
	A P	ACCESSION VERSION		12154	וידה או	457	8003	
	Ð	KEYWORDS			;	י ד		
	SO,		HOMO	Sapie	60 6	(human)		
•••	-	a through		Eukaryota;	Metazo	, d	File Metazoa, Chordata, Craniata, File Metazoa, Chordata, Catarrhin	Vertebrata;
	RE	FERENCE		(bases	1 to 1	9382	ורמדדוו	י שמשדוודמשבי
	. 7	AUTHORS		Muzny, D.M.	., Adam	Ď,	la, B.	osman, F.R., Allen, C.,
_			ALS	orooks,	S.L.,	-mar	Are, J	T., Barbarı

Bewie, S., Brieve, Bonnin, D., Bouck, J.,
Bewie, S., Brieve, B., Biankenburg, K., Bonnin, D., Bouck, J.,
Burch, P., Burkett, C., Burrell, K.L., Bycd, N.C., Carron, T.E.,
Carter, M., Cavazoo, S.R., Chacko, J., Chen, C., Chen, R.,
Chen, Z., Chowdhry, I., Christopoulos, C., Cleveland, C.D., Cox, C.,
Coyle, M.D., Dathorne, S.R., David, R., Davila, M.L., Davis, C.,
Davy-Carroll, L., Dederich, D.A., Delaney, K.R., Delgado, O.,
Denn, A.L., Ding, Y., Dinh, H.H., Douthwale, K.J., Deper, H.,
Dugar-Roche, S., Durbin, K.J., Earnhart, C., Egrapr, D., Edwards, C.C.,
Elbaj, C., Escotto, M., Earnhart, C., Egrapr, D., Edwards, C.C.,
Elbaj, C., Escotto, M., Earnhart, C., Egrap, N., Ford, J.,
Garza, M., Gall, R., Gablei, A., Gao, J., Garcia, A., Garner, T.,
Garza, M., Gall, R., Gablei, A., Gao, J., Garcia, A., Garner, T.,
Garza, M., Gall, R., Garell, T., Ferraguto, D., Flag, N., Hawes, A.,
He, X., Hernandez, J., Hernandez, O., Hodgson, A., Hogues, M.,
He, X., Hernandez, J., Hernandez, O., Hodgson, A., Hogues, M.,
Holloway, C., Hollins, B., Homelj, P., Howards, Y., Johnson, R., Jolivet, S.,
Joudah, S., Karlsson, E., Kelly, S., Khan, U., King, L., Korvah, J.,
Kartovic, T., Karconi, P., Marchin, P., Jan, Y., Johnson, R., Jolivet, S.,
Joudeh, S., Karlsson, E., Kelly, S., Khan, U., King, L., Korvah, J.,
Kartovic, J., Li, J., Lidhtarge, O., Lieu, C., Liu, J., Lun, M.,
Martine, E., Masey, B., Mann, P., Martindale, A.,
Martines, M., Morgan, M., Morer, S., Moser, M., Neuser, M.,
Nockerson, E., Washington, P., Martin, Ren, Y., Rives, M.,
Sont, G., Shen, H., Shooken, Y., Rome, S., Ward-Moore, S.,
Sont, G., Shen, H., Shooken, M., Thomas, S., Ward-Moore, S.,
Warren, R., Washington, C., Watlington, S., Williamson, A., Washington, C., Wayllor, S., Warren, S., Wa Submitted (28-JUN-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA On Jun 30, 2001 this sequence version replaced gi:14547736. INFORMATION: https://www.hgsc.bcm.tmc.edu/or email Submitted (10-JUL-2001) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA Submitted (21-OCT-1999) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA (bases 1 to 193829) Submitted (07-JUL-2001) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA (bases 1 to 193829) Submitted (28-JUL-2001) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One . Baylor Plaza, Houston, TX 77030, USA 6 (Dases 1 to 193829) Baylor Plaza, Houston, 5 (bases 1 to 193829) (bases 1 to 193829) Direct Submission Inpublished Torley, K.C. Submission Submission Submission Worley, K.C. orley, K.C. Worley, K.C. Worley, K. Sibbs, R Direct rect REFERENCE AUTHORS TITLE JOURNAL REFERENCE AUTHORS TITLE JOURNAL TITLE JOURNAL AUTHORS TITLE TITLE JOURNAL TITLE JOURNAL AUTHORS REFERENCE AUTHORS RFERENCE JOURNAL REFERENCE

LLONE LENGTH: This sequence does not necessarily represent the entire insert of this clone. Overlapping regions of clones are only sequenced and submitted once, so the sequence for the remainder of the insert may be found in the record for the adjacent clones. Overlapping clones are noted at the beginning and end of the Features listing.

ANNOTATION OF FEATURES:

STSs are identified using ePCR (Genome Res. 7:541-550) searches of a local database that includes entries from dbSTS, GDB, and

local mapping efforts.

Repears are identified using RepeatMasker (A. Smit and P. Green, unpublished.) for Human and Mouse sequences.

Genes and Region of sequence similarity are identified by BiAST (Nuc. Acids Res. 25:3389-3402) similarity (expect < 1e-34) to the EST and cDNA sequences. Genes demonstrate at least two exons flanked by consensus splice sites that maintained sequence continuity across the splice junctions. Sequences that are not identical matches are annotated as similar.

SEQUENCING READ COVERAGE.Sequencing is completed to a minimum standard of double strand coverage with a minimum of 2 clones and 2 reads with no ambiguities or 2 chemistries with a minimum of 2 clones and 3 reads with no ambiguities. If the sequence quality for a region does not meet this standard, it will be indicated in the annotation as low Coverage.

QUALITY OF INDIVIDUAL BASES:This sequence meets stringent quality standards - estimated error rate less than 1 per 10,000 bases. Reports of lowest quality individual bases and measures of base quality are listed below. Description of the metrics can be found http://gc.bcm.tmc.edu:8088/quality.info/genbank.annotation.html

```
note="overlaps bases 152829. .154828 of AC069070" function="clone overlap"
                      1. .193829
organism="Homo sapiens"
                                                                                                                                                                                                                                                                     /rpt_family="MER2"
1684. .1895
                                                                                                                                                                                          563. .584
/rpt_family="(TAAA)n"
607. .787
                                                                                                                                                                                                                                                family="MER2"
                                           /mol_type="genomic_DN/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                 rpt_family="AluSg1"
          Location/Qualifiers
                                                                                                                                                113. .. 562
rpt_family="AluJb"
                                                                                                                                                                                                                              .787
family="MER20"
                                                                                                                                                                                                                                                                                                                                                                         /rpt_family="(CA)n"
                                                                                clone="RP11-48H24"
                                                                                                                               244. .365
/rpt_family="AluJb"
                                                                                                                                                                                                                                                                                                                                                                                                                                /rpt_family="MLT11"
3005. .3126
                                                                                                                                                                                                                                                                                                                                                                                                    rpt_family="HAL1"
                                                                                                                                                                                                                                                                                                             rpt_family="HAL1"
                                                                                                                                                                                                                                                                                                                                                            'rpt_family="HAL1"
QUALSTAT-REPORT
                                                                                                                                                       repeat_region
                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                repeat_region
                                                                                                                                                                                                     repeat_region
                                                                                              misc_feature
                         source
           FEATURES
```

COMMENT

```
Center: Baylor College of Medicine
Center: Baylor College of Medicine
Center: College of Medicine
Center: College of Medicine
Neb Site: http://www.hgsc.bcm.tmc.edu/
Neb Site: http://www.hgsc.bcm.tmc.edu/
Contact: hgsc-help@bcm.tmc.edu
Contact: hgsc-help@bcm.tmc.edu
Center project name: RP11-32110
Center clone name: RP11-32110
Center clone name: RP11-32110
Center clore name: RP11-32110
Center clore name: RP11-32110
Center clore name: RP11-32110
Center clore name: RP11-32110
Center project name: RP11-32110
Center clore name: RP11-32110
Center clore name: RP11-32110
Center clore name: RP11-32110
Center clore name: RP11-32110
Center project name: RP11-32110
Center clore name: RP11-32110
Center clore name: RP11-32110
Center clore name: RP11-32110
Center clore name: RP11-32110
Center clore name: RP11-32110
Center clore name: RP11-32110
Center clore name: RP11-32110
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center project name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center clore name: RP11-3210
Center name: RP11-3210
Center name: RP11-3210
Center name: RP11-3210
C
                                                    Mammalia, Witherlay, Firmates; Catarinii; Hominidae; Homio, Mammalia; Witherlay, Primates; Catarinii; Hominidae; Homio, Mammalia; Marzyt, M. Adams, C., Adio-Oduola, B., Ali-comman, F. N. Allabrooks; S. L., Amaraturge, H. C., Are, J. R., Banks, T., Banks, T., Banks, J., Benton, J., Bimage, K., Blankenburg, K., Bonnin, D., Bouck, J., Burch, P., Burkett, C., Burchl, K., Byrd, N. C., Carron, T. F., Carron, T. F., Carron, T. F., Chowdhry, I., Claracko, J. Chave, D., Chen, C., Coyle, M. D., Dathorne, S. R., Chacko, J., Chevel, M. C., Cox, C., Coyle, M. D., Dathorne, S. R., Chacko, J., Cherla, M. L., Davis, C. Davy, Carroll, L., Dederich, D. A., Delaney, K. R., Delado, O., Denn, A.L., Ding, Y., Dinh, H. H., Douthwalte, K. J., Draper, H., Duyan, Rochas, S., Durbin, K. J., Earnhart, C., Edgar, D., Edwars, C., Elhaj, C., Escotto, M., Falls, T., Ferraguto, D., Flags, N., Ford, J., Forter, P., Frantz, P., Gabisi, A., Gao, J., García, A., Ganer, T., Garra, N., Gill, R., Gorchell, J. H., Guevera, M., Gunaratne, P., Hale, S., Hamilton, K., Harris, C., Harris, C., Harris, C., Harris, C., Harris, C., Harris, C., Harris, C., Harris, C., Harris, C., Harris, C., Huber, J., Hulyk, S., Hume, J., Hollinay, E., Homei, F., Howard, S., Huber, J., Hulyk, S., Hume, J., Joddah, S., Karlsson, B., Jia, Y., Johnson, R., Jolian, B., Homei, F., Howard, S., Khan, U., King, L., Korvah, J., Lottleeged, H., Lozado, R.J., Lu, X., Lucier, R., Junia, R., Martindalle, A., Matter, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., Mayuen, M., May
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Direct Submission
Submitted (07-57M-2000) Human Genome Sequencing Center, Department
And Molecular and Human Genetics, Baylor College of Medicine, One
Baylor Plaza, Houston, TX 77039, USA
On Jun 25, 2001 this sequence version replaced gi:14333746.
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi;
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  * NOTE: Estimated insert size may differ from sequence length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 (bases 1 to 218508)
Worley, K.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   33803 ACCCGACTTTCCAAAGAGTACTAGTTCCTTTTAGCAGTGATTAGAAACCTGATCTGAGTA 33744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    33863 AGACATCATCTTTCTTTGAGATCTTCCTTGCTTTCTGGCCAAAGAAGTTATTCCCTG 33804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               33923 TTATTTTTATGCTAAATTTTTTCCAGATATGGCTACTGGGATTCTGTTCAACTGAGTGA 33864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACUZU639

100-2001

Homo sapiens chromosome 3 clone RP11-32L10, WORKING DRAFT SEQUENCE, NORKING DRAFT SEQUENCE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             245 AGACATCATCTTTCTTTGAGATCTTCCTTGCTTTCTGGCCAAAGAAGTTATTCCCTG 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   305 ACCCGACTTTCCAAAGAGTACTAGTTCCTTTTAGCAGTGATTAGAAACCTGATCTGAGTA 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         33743 CTACTGTGTGTGTGCTTGTGACTAGTGTGTTTTATTGTTTCTATGTCCTTTCGGGAG 33687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                365 CTACTGTGTGTGCTTGTGACTAGTGTGGTTTTATTGTTTCTATGTCCTTTCAGCGAG 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       185 TTTTTTATGTGAGGACTCGGTCTCAGATATGGCTACTGGGATTCTGTTCAAACTGAGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 51.7%; Score 217.8; DB 9; Length 193829; Best Local Similarity 94.9%; Pred. No. 2.2e-54; Matches 225; Conservative 0; Mismatches 12; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10355. .10398
/rpt_family="(GA)n"
complement(10948. .11063)
/rpt_family="LiP4"
11038. .11356
                                                                                                                                                                                                                                                                                                                                       /standard_name="76067"

complement[7298. 7577)

'rpt_family="Aludo"

8422. .8458

/rpt_family="AT_rich"

/rpt_family="Af_rich"

/rpt_family="MLTID"

9120. .9187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rpt family="Harlequin"
3048. .13086
rpt family="GA-rich"
3117. .13360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rpt_family="(CATATA)n"
1695_ .10135
rpt_family="MLT1C"
0323_ .10355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HTG; HTGS_PHASE1; HTGS_DRAFT.
HOMO sapiens (human)
HOMO sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rpt_family="GA-rich"
4717. .14744
   rpt_family="HAL1"
181_.3228
rpt_family="(TATG)n"
230_.3273
                                                                                                                                         'rpt_family="AT_rich"
503. .3628
                                                                                                                                                                                                        /rpt_family="LTR12"
3629. 4072
/rpt_family="LTR12"
4600. 4699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rpt_{mily="LIPA12"} 2326. .12366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'rpt family="(TG)n"
.0355. .10398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14745. .14778
/rpt_family="MADE1"
14779. .1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rpt_family="(TA)n"
4745. .14778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1477<u>9</u>. .14<u>8</u>22
/rpt_family="(TA)n"
                                                                                                                                                                                                                                                                                                             .4699
                                     repeat_region
                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 2
AC020639/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
```

g ઠે 셤 ठ g ò 셤

```
Sirren, B. 'Linton, L., Nusbaum, C., Lander, E., Abraham, H., Allen, N., Anderson, S., Baldwin, J., Barna, N., Beckerly, R., Beda, F., Boushaghter, B. Boushaw, J., Burker, S., Beda, F., Boushaller, B., Buckerly, R., Beda, F., Choepel, Y., Colangelo, M., Collins, S., Collymore, A., Cooke, P., Dearellano, K., Dewar, K., Domino, M., Doyle, M., Fenestor, J., Ferreira, P., Filziugh, W., Forrest, C., Gage, D., Galagan, J., Gardyna, S., Grant, G., Hagos, B., Haedrod, A., Horton, L., Howland, J.C., Johnson, R., Jones, C., Kann, L., Karatas, A., Klein, J., Landers, T., Lehock, M., Levine, R., Lieu, G., Looke, K., Macdonald, P., Marquis, N., Meneus, L., McGurk, A., McKernan, K., Norman, C.H., O'Connor, T., O'Donnell, P., Moruk, A., Maylor, J., Pisani, C., Pollara, V., Raymond, C., Riley, R., Severy, P., Spencer, B., Stenge-Thomann, N., Stojanovic, N., Subramanian, A., Talamas, J., Tesfaye, S., Theodore, J., Zimmer, A. and Zody, M., Viel, R., Vo, A., Wu, X., Wyman, D., Ye, W.J., Zimmer, A. and Zody, M., Wiel, R., Vo, A., Wu, X., Wyman, D., Ye, W.J., Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Direct Submission

Direct Submission

Submitted (20-JAM-2000) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA

1 (Dases 1 to 16349)

B irren, B., Lintcon, L., Nusbaum, C., Lander, E., Ali, A., Allen, N., Anderson, S., Barna, N., Bastien, V., Boguslavkiy, L., Boukhgalter, B., Colangelo, M., Collins, J., Chang, J., Chararo, J., Campoplano, A., Campoplano, M., Campoplano, M., Collins, S., Collymore, A., Cook, A., Cook, P., DeArellano, K., Dewar, K., Diaz, J.S., Dodge, S., Ferreira, P., Fitzhugh, W., Gargel, D., Galagan, J., Gard, Perreira, D., Fitzhugh, W., Grapham, L., Grand-Pierre, N., Jones, Jones, J., Marchas, C., Landers, T., Liu, G., Lamazares, R., Landers, T., Marchas, C., Lamazares, R., Landers, T., Marchin, M., McEwan, P., McKernan, K., Marche, R., Liu, G., Macdonald, P., Major, J., Marquis, N., Mathews, C., Macdonald, P., Major, J., Marquis, N., Mathews, C., Norbu, C., Norbu, C., Norbu, C., Norbu, C., Norbu, C., Norbu, C., Norbu, C., Norbu, C., Raymond, C., Retras, R., Phunkhang, P., Pierre, N., Peterson, W., Santos, R., Santos, R., Santos, R., Stolupback, R., Stantos, N., Stolanovic, N., Stolanovic, N., Stolanovic, N., Stolanovic, N., Stolanovic, N., Stolanovic, N., Stolanovic, N., Stolanovic, N., Viell, R., Volan, W., Wilson, M., Travis, N., Talamas, J., Yew, W.J., Young, G., Zainoun, J., Zembek, L., Zammer, A. and Zody, M., Zambek, L., Zammer, A. and Zody, M., Direct Submission.
                                                                                                                                                       ACO21829 163497 bp DNA linear PRI 23-JAN-2002
Homo sapiens chromosome 11, clone RP11-436H16, complete sequence.
ACO21829
165309 CTACTGTGTGTGTGTGACTAGTGTGTTTTATTGTTTCTATGTCCTTTCAGCGAG 165253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. I to 163497) Birren, B., Linton, L., Nusbaum, C. and Lander, E. Homo. Sapiens chromosome 11, clone RP11-436H16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Web site: http://www-seq.wi.mit.edu
                                                                                                                                                                                                                                                                                                  AC021829.8 GI:17647005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (bases 1 to 163497)
                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                               RESULT 3
AC021829/c
LOCUS
                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              165369 ACCCGACTTTCCAAAGAGTACTAGTTCCTTTTAGCAGTGATTAGAAACCTGATCTGAGTA 165310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               165430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              165429 AGACATCATCATCTTTCTTTGAGATCTTCCTTGCTTTCTGGCCAAAGAAGTTATTCCCTG 165370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        185 TTTTTTATGTGAGGACTCGGTCTCAGATATGGCTACTGGGGATTCTGTTCAAACTGAGTGA 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCCGACTTTCCAAAGAGTACTAGTTCCTTTTAGCAGTGATTAGAAACCTGATCTGAGTA 364
           data.html)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTACTGTGTGTGCTTGTGACTAGTGGGTTTTATTGTTTCTATGTCCTTTCAGCGAG 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       165489 TIATITITATGCTAAATTTTTCCAGATATGCCTACTGGGGTTCTGTTCAAACTGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       245 AGACATCATCTTTCTTTGAGATCTTCCTTGCTTTCTGGCCAAAGAAGTTATTCCCTG
(see http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_dal NOTE: This is a 'working draft' sequence. It currently consists of 19 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 2; Length 218508;
                                                                                                                                                                                                                                                                                                                          70229; contig of 70229 bp in length 70329; gap of unknown length 103341; contig of 33012 bp in length 10341; gap of unknown length 10341; gap of unknown length 15564; contig of 32723 bp in length 155333; contig of 19069 bp in length 165643; gap of unknown length 160564; contig of 5131 bp in length 167685; contig of 7021 bp in length 167685; contig of 7021 bp in length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown length 174526; gap of unknown le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       s: contig of 3387 bp in length
s: gap of unknown length
o: contig of 5047 bp in length
o: gap of unknown length
s: contig of 3355 bp in length
s: gap of unknown length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  bp in length
length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        210654: contig of 3827 bp in length
210754: gap of unknown length
21341: contig of 2677 bp in length
213531: gap of unknown length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           contig of 2400 bp in length
gap of unknown length
contig of 2477 bp in length.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        contig of 3174 bp in length
gap of unknown length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 length
bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            b<u>p</u>in length
length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                51.7%; Score 217.8; DB 2; 94.9%; Pred. No. 2.2e-54; iive 0; Mismatches 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4237 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          contig of 3801 b
gap of unknown 1
contig of 4383 b
gap of unknown 1
contig of 4237 b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        contig of 4017
gap of unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .218508

Organisme"Homo sapiens"

Mol_type="genomic DNA"

db_xref="taxon:9606"

/chromosome="3"

/clone="RP11-32110"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           216031:
218508:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           174526:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     194999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        al Similarity
225; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     136165
136265
155334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       67686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local
Matches 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
```

q ઠે 셤

셤 ò

```
/clone="RP11-436H16"
/clone lib="RP11-11 Human Male BAC"
complement(1. .2122)
/rpt family="L1M1"
/rpt family="Alug"
/rpt family="Alug"
/complement(3786. .2671)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /rpt_family="LiME"
10445...10530
/rpt_family="(GAAA)n"
10782...10787
/note="<30 qual SNGL region"
11039...11078
/rpt_family="(T)n"
complement(11034...11279)
/rpt_family="WLTIF"
/rpt_family="WLTIF"
/rpt_family="WLTIF"
/rpt_family="WLTIF"
/rpt_family="WLTIF"
/rpt_family="WLTIF"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         //102. 1.4753
/rpt_family="(TC)"
/rpt_family="(TC)"
/rpt_family="1.3"
/rpt_family="1.3"
/rpt_family="1.3"
/rpt_family="L1MD3"
/rpt_family="L1MD3"
/rpt_family="L1MD3"
/rpt_family="L1MD3"
/rpt_family="L1MD3"
/rpt_family="L1MD3"
/rpt_family="L1MD3"
/rpt_family="L1MD3"
/rpt_family="L1MD3"
/rpt_family="L1MD3"
/rpt_family="L1MD3"
/rpt_family="L1MD3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11548. .11588
/rpt_family="(CA)n"
complement (12712. .12893)
/rpt_family="MIR"
13048. .13478
                                                                                                                                                                                                                                                                          4136. .4174
/rpt family="(CA)"
complement (5803. .6089)
/rpt family="Alusg"
/rpt family="Mill"
/rpt family="WillD"
                                                                                  1. .163497
/organism="Homo sapiens"
/mol_type="genomic DNa"
/db_xref="taxon:9606"
/chromosome="11"
                                                                                                                                                                                                                                                   /rpt_family="MIR"
136. .417
                                                                                                                                                                                                                                                                                                                                                                                      _family="AT_rich"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -1- LLME"
0140. .8356
/rpt_family="LLME"
1363. .8520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rpt_family="L1PA16"
696. 8886
                                                                                                                                                                                                                                                                                                                                                                                                                                                     7959. .8092
/rpt_family="LIME"
8140. .8356
                                                                                                                                                                                                                                                                                                                                                                                                   .,,33
rpt_family="LIME"
734. .7824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rot family="MER68"
4702. .14753
                                                                                                                                                                                                                                                                                                                                                                                                                               734. .7824
rpt_family="(TA)n"
                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              unsure
                                                                                          source
                                                                         FEATURES
```

```
39200 166AGTITCTICCTICCTICTGGGGGTTCATGGTCTCGCTCGCTTCAGGAGTGAAGCTGCAGA 39141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 IGGAGITTCTICATICIGGAAGGITCGTGGICTCTCTGGCTTCAGAATGAAGCTGTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 90.1%; Pred. No. 6.7e-07;
Matches 64; Conservative 0; Mismatches 7; Indels 0;
/note="<30 qual SNGL region"
20404. 21800
/rpt family="LTR12"
complement (21583. .22973)
/rpt family="LIMG"
complement (21583. .2354)
/rpt family="MBR97c"
complement (23009. .2754)
/rpt family="MBR97c"
complement (24572. .24870)
/rpt family="MBR88B"
25237. .25272
/rpt family="MBR88B"
25345. .25272
/rpt family="THBIC"
25345. .25272
/rpt family="AT_rich"
27915. .28123
/rpt family="MFR30"
28522. .28555
/rpt family="MRR30"
28522. .28555
/rpt family="MRR30"
28522. .28555
/rpt family="LIP89"
/rpt family="LiP89"
/rpt family="LiP89"
/rpt family="LiP89"
                                                                                                                                                                                                                                                                                                                                  /rpt family="LiM4"
complement (31838 ..32080)
/rpt family="LiM4"
complement (32100 ..32281)
/rpt family="LiM4"
                                                                                                                                                                                                                                                                                                                                                                                                                                           4012<u>2</u>. .40<u>i</u>51
/rpt_family="AT_rich"
complement(40155. .40512)
/rpt_family="MER114"
                                                                                                                                                                                                                                                                                                       /rpt family="LiM4"
complement(31707, 31707)
rpt f===
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rpt family="AluSg"
omplement (350=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         omplement (35955. .36138)
rpt family="LiPA14"
6142. .36597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   / rpt_family="Lip"
36910. 36932
36910. 36932
37002. 37030
7 rpt_family="AT_rich"
37940. 39330
7 rpt_family="PTRS"
39419. 39802
7 rpt_family="WRK67C"
40122. 40151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                39140 ccrcrcccarc 39130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62 ACTCTGCGATG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                    repeat_region
                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                repeat_region
                                                                                                           repeat_region
                                                                                                                                       repeat_region
                                                                                                                                                                  repeat_region
                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
```

ö

us-10-051-835-16.rge

```
133972 CCTTAGAGATG 133982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
Homo sapiens
                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                             irect Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 TGGAGTTTCTTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62 ACTCTGCGATG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
Matches 63; Conserv
                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STS Content
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AC091874/c
RESULT 5
AC016572
LOCUS
DEFINITION
                                                                                                                                                                  SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                       ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SDOOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                        Libyd,D.

Lipyd,D.

Direct Submission

M. Direct Submission

Submitted (20-DEC-2000) Sanger Centre, Hinxton, Cambridgeshire,
CB10 1SA, UK. E-mail enquiries: humquery@sanger.ac.uk Clone
requests: clonerequest@sanger.ac.uk

CB10 1SA, UK. E-mail enquiries: humquery@sanger.ac.uk Clone
requests: clonerequest@sanger.ac.uk

On Dec 22, 200 (this sequence version replaced gi:11691527.

During sequence assembly data is compared from overlapping clones.

Where differences are found these are annotated as variations

where differences are found these are annotated as variations

where differences are found these are annotated as variations

corresponding to the overlapping clone, as we submit sequences variation annotation may not be found in the sequence submission

corresponding to the overlapping clone, as we submit sequences with only a sequence has been finished according to sequence authoriasion

as follows. An attempt is made to resolve all sequencing problems, such as compressions and repeats, but not necessarily within known annotated repeat sequence elements. Where the sequence is an annotation using the 'unsure' feature key.

The following abbreviations are used to associate primary accession numbers given in the feature table with their source databases:

Em: SMREN; Swy: SMRSENGY; Tr:, TREMBI; Wp:, WORWPEP; Information on the WORWPEP database can be found at http://www.sanger.ac.uk/Projects/Celegans/wormpep This sequence chromosome 9, constructed by the Sanger Centre Chromosome 9 mapping Group. Further information can be found at http://www.sanger.ac.uk/HGPP/CHP.

RP11-31F19 is from the library RP01-11.1 constructed by the group of Pieter de Jong. For further details see
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VECTOR: pBACe3.6
IMPORTANT: This sequence is not the entire insert of clone
Strins: This sequence is not the entire insert of clone
sections only once, except for a 100 base overlap.
The true left end of clone RPI1-130C19 is at 77932 in this sequence. The true right end of clone RPI1-165F24 is at 100 in this
                                                 AL392089 78031 bp DNA linear PRI 21-DEC-2000 Human DNA sequence from clone RPI1-31F19 on chromosome 9p24.1-24.3,
                                                                                                                                                                                                                                        Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammala; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 78031)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 GAGITICITCATICIGGIAGGIICGIGGICICICIGGCITCAGGAAIGAAGCIGIAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 82.7%; Pred. No. 1.6e-06;
Matches 67; Conservative 0; Mismatches 14; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
1. .78031
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="genomic_DNA"
/db_xref="teaxon:9606"
/chromosone="9"
/map="p24.1-24.3"
/clone="RP1-31F19"
/clone=lib="RPCI-11.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             32941 Trcccccrcacrcraacacr 32961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            64 TCTGCGATGCTGTTATGAACT 84
                                                                                                                                                   AL392089.7 GI:11967571
                                                                                                                                                                                              Homo sapiens (human)
                                                                                                  complete sequence
                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequence.
                                                                                                                              AL392089
                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                        LOCUS
                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
JOURNAL
                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                   REFERENCE
          RESULT 4
AL392089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
```

```
133912 redakertretreerretregrederregregretreteregerretaksakerrekaka 133971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AC091874 146078 bp DNA linear PRI 03-APR-2003
Homo sapiens chromosome 5 clone CTD-2593A12, complete sequence.
AC091874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
ACU16572 143687 bp DNA linear PRI 17-OCT-2001
Homo sapiens chromosome 5 clone CTB-22L19, complete sequence.
AC016572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Direct Submission
Submitted (04-DEC-1999) Production Sequencing Facility, DOE Joint
Genome Institute, 2800 Mitchell Drive, Walnut Creek, CA 94598, USA
3 (Dases 1 to 143687)
DOE Joint Genome Institute and Stanford Human Genome Center.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 146078)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Direct Submission
Submitted (01.JUL-2000) DOE Joint Genome Institute, 2800 Mitchell
Drive, Walnut Creek, CA 94598, USA
4 (bases 1 to 143687)
DOE Joint Genome Institute and Stanford Human Genome Center.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Direct Submission
Submitted (17-077-2001) DOE Joint Genome Institute, 2800 Mitchell
Submitted (17-077-2001) DOE Joint Genome Institute, 2800 Mitchell
Drive, Walnut Creek, A2 94598, USA
ON Oct 17, 2001 this sequence version replaced gi:8886979.
Draft Sequence Produced by DOE Joint Genome Institute
www.jgii.doe.gov
Finishing Completed at Stanford Human Genome Center
                                                                                                                                                                                                                                             Eukaryora, Merazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGTAGGTTCGTGGTCTCTCTGGCTTCAGGAATGAAGCTGTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 143687)
DOB Joint Genome Institute and Stanford Human Genome Center.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ch 13.8%; Score 58.2; DB 9; Length 143687; L Similarity 88.7%; Pred. No. 2e-06; 63; Conservative 0; Mismatches 8; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          www-shgc_stanford.edu
Quality: Phrap Quality >=40 99.8% of Sequence;
Estimated Total Number of Errors is 0.2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WI-15997 G21714.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished
2 (bases 1 to 143687)
DOE Joint Genome Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AC091874.4 GI:29501850
                                                                                                                          AC016572.6 GI:16195210
```

us-10-051-835-16.rge

```
3467:
5552:
5652:
7724:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17059:
21538:
21638:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2160:
3367:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7824:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11645:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16989:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           33103:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     39895:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5553
5653
7725
7825
11646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16960
17060
21539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21639
                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         90111 TGGAGTTTCTTCCTTCTGGTGGGTTCGTGGTCTCTGGCTTCAGGAGTGAAGCTGCAGA 90052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HTG 26-MAY-2000
                                                                                               Direct Submission

Direct Submission

Sequencing Facility, DOE Joint Genome Institute, 2800 Mitchell Drive, Walnut Creek, CA 94598, USA (Bases 1 to 146078)

DOE Joint Genome Institute and Stanford Human Genome Center.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Birren,B., Linton,L., Nusbaum,C., Lander,E., Abraham,H., Allen,N.,
Anderson,S., Baldwin,J., Barna,N., Bastien,V., Beda,F.,
Boguslavkiy,L., Boukhgalter,B., Brown,A., Burkett,G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Quality: Phram Quality >=40 100% of Sequence;
Estimated Total Number of Errors is 0.
NOTE: Transposon sequencing failed to verify the number of repeat copies 12696-13210. Theure number of repeat copies 12696-13210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AC025306 174994 bp DNA linear HTG 26-MAY-2000
Homo sapiens clone RP11-24F7, WORKING DRAFT SEQUENCE, 20 unordered
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="NOTE: Transposon sequencing failed to verify the number of repeat copies 12696-13210. Unsure number of repeat copies 12696-13210."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                Direct Submission
Submitted (12-MRA-2003) DOE Joint Genome Institute, 2800 Mitchell
Drive, Walnut Creek, CA 94598, USA
4 (Dases 1 to 146078)
DOE Joint Genome Institute and Stanford Human Genome Center.
                                                                                                                                                                                                                                                                                                                     Submitted (03-APR 2003) DOE Joint Genome Institute, 2800 Mitchell Drive, Walnut Creek, CA 94589, USA On Apr 3, 2003 this sequence version replaced gi:29150342.
Draft sequence Produced by DOE Joint Genome Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGAGTTTCTTCATTCTGGTAGGTTCGTGGTCTCTCTGGCTTCAGGAATGAAGCTGTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
  NOE Joint Genome Institute and Stanford Human Genome Center.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 13.8%; Score 58.2; DB 9; Length 146078; Best Local Similarity 88.7%; Pred. No. 2e-06; Matches 63; Conservative 0; Mismatches 8; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                         www.jgi.doe.gov
Finishing Completed at Stanford Human Genome Center
www-shgc.stanford.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 174994)
Birren, B., Linton, L., Nusbaum, C. and Lander, E.
Homo sapiens, clone RP11-24F7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="genomic_DNA"
/db_xref="taxon:9606"
/chromosome="5"
/clone="CTD-2593A12"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AC025306
AC025306.3 GI:8072565
HTG; HTGS_PHASE1; HTGS_DRAFT.
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                          2 (bases 1 to 146078)
DOE Joint Genome Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12696. .13210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (bases 1 to 174994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         90051 CCTTAGAGATG 90041
                                                                                                                                                                                                                                                                                                        Direct Submission
                     Direct Submission
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62 ACTCTGCGATG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 7
AC025306/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
AUTHORS
TITLE
JOURNAL
                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ଟ
```

```
Campopiano, A., Castle, A., Choepel, Y., Colangelo, M., Collins, S., Collymore, A., Cooke, P., DeArellano, K., Dewar, K., Diaz, J.S., Dodge, S., Domino, M., Doyle, M., Ferreira, P., Fitzhugh, W., Gage, D., Galdgan, J., Gardyna, S., Ginde, S., Goyette, M., Graham, L., Grand, J., Gardyna, S., Ginde, S., Goyette, M., Graham, L., Grand, J., Ilev, I., Johnson, R., Jones, C., Kann, L., Karatas, A., Klein, J., LaRocque, K., Liu, G., Landers, T., Landersky, J., Karan, J., Karn, L., Karatas, R., Janders, T., McCharthy, M., McEwan, P., McGurk, A., McKernan, K., McDeatre, S., McCarthy, M., McEwan, P., McGurk, J., McCarthy, M., McEwan, P., McGurk, J., Meneus, L., Minor, T., Milenga, V., Milenga, V., Milenga, V., Milenga, V., Milenga, V., Milenga, V., Milenga, V., Milenga, V., Sencer, B., Stange-Thomann, J., Norman, C.H., O'Connor, T., O'Donnell, P., Grander-Thomann, N., Stojanovic, V., Suley, R., Spencer, B., Stanger-Thomann, N., Stojanovic, V., Suley, R., Wilson, B., Wu, X., Wyman, D., Ye, W. J., Tesfaye, S., Theodore, J., Tirrell, A., Travers, M., Trigilio, J., Vassiliev, H., Viel, R., Vo, M., Wilson, B., Wu, X., Wyman, D., Ye, W. J., Vassiliev, H., Viel, R., Wilson, B., Wu, X., Wyman, D., Ye, W. J., Direct Submission

Lirect Submission

Lirect Submission

Lirepats were identified using RepeatMasker: html

Lepats were identified using RepeatMasker: html

London, J., Ft., Senome Washington.edu/RM/RepeatMasker.html

London, J., Lire, M. Mile, M. MIR, Center for Genome Center: Miltehad Institute/ MIT Center for Genome Center. Miltehad Institute/ MIT Center for Genome Center. Miltehad Institute/ MIT Center for Genome Center. Miltehad Institute/ MIT Center for Genome Center. Miltehad Institute/ MIT Center for Genome Center.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 * NOTE: This is a 'working draft' sequence. It currently
tonsists of 20 contigs. The true order of the pieces
is not known and their order in this sequence record is
arbitrary. Gaps between the contigs are represented as
runs of N, but the exact sizes of the gaps are unknown.
This record will be updated with the finished sequence
as soon as it is available and the accession number will
be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Quality coverage: 4.4 in Q20 bases; agarose-fp
Quality coverage: 4.4 in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Center project name: 14449

Center clone name: 24 F 7

Center clone name: 24 F 7

Center clone name: 24 F 7

Sequencing vector: M13; M7815; 100% of reads Assembly program: Phrap; version 0.960731

Consensus quality: 164074 bases at least Q40

Consensus quality: 171310 bases at least Q20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Center code: WIBR
Web site: http://www-seq.wi.mit.edu
Contact: sequence submissions@genome.wi.mit.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100 bp
of 2072 bp in length
100 bp
of 3821 bp in length
100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    contig of 2060 bp in length
gap of 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gap of 100 bp
contig of 1207 bp in length
gap of 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2085 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5214 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100 bp
of 5431 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5934 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Insert size: 172000; agarose-fp
Insert size: 173094; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100 bp
of 4479 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ďď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   contig of
gap of 100
contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    contig of
gap of 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              contig
gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        contig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 contig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             contig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                contig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gap of
```

Length 174994;

DB 2;

13.7%; Score 57.8;

Query Match

Bukaryota, Mesazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Bukaryota, Mesazoa, Chordata, Catarrhini, Hominidae; Homo.

Elabaryota, Mesazoa, Adio-Oduola, B., Ali-osman, F.R., Allen, C., Alabaratunge, H.C., Are J.R., Ayele, M., Banka, T., Barbaria, J., Barbaria, S., Briever, M., Brown, B., Baryant, M. B., Banka, T., Barbaria, J., Bondh, D., Barbaria, J., Barke, S., Briever, M., Barwan, R., Born, M., Barka, T., Bubay, C., Burch, P., Burch, P., Burch, P., Burch, P., Burch, P., Burch, P., Burch, P., Burch, P., Burch, P., Burch, P., Durch, P., Carter, M., Cavazos, S.R., Charko, J., Chavaz, D., Cox, C., Coyle, M.D., Dathorne, S.R., David, R., Davis, C., Davis, C., Davis, C., Davis, C., Davis, C., Elbaj, C., Ederich, D., A., Delandy, K.R., Delgar, D., Flago, M. D., Dathorne, S.R., Durbin, K.J., Douthwitte, K.J., Draper, H., Dugan-Rocha, S., Durbin, K.J., Douthwitte, K.J., Draper, H., Dugan-Rocha, S., Durbin, K.J., Davis, C., Elbaj, C., Elbaj, C., Escotto, M., Fallis, T., Perraguco, D., Flago, M., Ford, J., Foster, P., Frantz, P., Garris, A., Ganner, M., Ganral, M., Holloway, C., Hollins, B., Homsi, F., Howard, S., Hale, S., Hamilton, K., Harris, K., Har PRI 30-SEP-2002 0 Direct Submission Submitted (09-AUG-2001) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Homo sapiens 3q BAC RP11-396Ab DNA linear PRI 30-SEP.
Human BAC Library) complete sequence.
AC092963
AC092963.4 GI:18958598 4 GAGTITCITCATICIGGIAGGITCGIGGICICICIGGCITCAGGAAIGAAGCIGIAGAAC Gaps . 0 Indels Pred. No. 2.7e-06; 0; Mismatches 7; : \$6.68 sapiens (human) 105727 Trccccccrc 105719 Best Local Similarity 89.9 Matches 62; Conservative Submission 64 TCTGCGATG 72 Worley, K.C. RESULT 8 AC092963 LOCUS DEFINITION VERSION KEYWORDS SOURCE ORGANISM TITLE JOURNAL REFERENCE AUTHORS TITLE JOURNAL REFERENCE AUTHORS ACCESSION ద ઠે

AUTHORS TITLE JOURNAL

REFERENCE

JOURNAL

REFERENCE

AUTHORS TITLE JOURNAL

COMMENT

REFERENCE

```
Score 57.2; DB 9;
Pred. No. 4.1e-06;
0; Mismatches 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1y="L1MD1"
E(16465)
                                                                                                                                                                                 complement [2959. .3220)
/rpt_family="Aluco"
complement (3221. .3973)
/rpt_family="LIM1"
3975. .4011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               family="Alusg"
ement (1400)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /rpt family="LiM4"
complement (6318. .6934)
/rpt family="MER41B"
complement (6964. .7398)
/rpt family="LiFA7"
7418. .7521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /rpt family="Aimsy
complement (14232, .14383)
/rpt_family="MER92A"
/rpt_family="AFR92A"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       family="LIMD1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /rpt_family="(TTTA)n"
complement(8491..8576)
/rpt_family="AluSc"
8590..9363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /rpc_family="L1MD1"
complement(15302, 15691)
/rpc_family="MLT1B"
15719. 15790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /rpt_family="L1MD1"
complement(16445. .16817)
/rpt_family="(TAAA)n"
complement (890. 1249)
/rpt_family="THE1C"
complement (1252. 2594)
/rpt_family="Lin1"
complement (2595. 2896)
/rpt_family="Lin1"
/rpt_family="Lin1"
/rpt_family="Lin1"
/rpt_family="Lin1"
/rpt_family="Lin1"
/rpt_family="Lin1"
/rpt_family="Lin1"
/rpt_family="Lin1"
                                                                                                                                                                                                                                                                                     /rpt_family="(TG)n"
complement(4012. .4231)
/rpt_family="LiM2"
4229. .4347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /rpt family="(TG)n"
complement (5397. .5524)
/rpt family="MIR"
/5940- .631
                                                                                                                                                                                                                                                                                                                                                                                                                                                 .complement(5299. .5353)
/rpt_family="MIR"
5354. .5306
                                                                                                                                                                                                                                                                                                                                                                                                                         family="LIM2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                complement (9380. .9932) /rpt_family="MLT2A"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   family="AT_rich" .13203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                family="(TTTG)n"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /rpt_family="L1ME3A"
8458. .8490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /rpt_family="LlM4"
7753 .8085
/rpt_family="LlM4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               family="L1ME3A"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "MLT1A1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   family="MLT1A1"
                                                                                                                                                                                                                                                                                                                                                                                                      family="L1M2"
                                                                                                                                                                                                                                                                                                                                                                                                                              complement (4434.
/rpt_family="L1M2
complement (5299.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /rpt_family="(TT
complement(13204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       complement (14405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      complement (16327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             family=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        family=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 88.6
Matches 62; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /rpt_f
[018].
                                                                                                                                                                                                                                                                                                                                                                                                        rpt_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /rpt_
                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                       repeat_region
                                                                                                                  repeat_region
                                                                                                                                                           repeat_region
                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCING READ COVERAGE:Sequencing is completed to a minimum standard of double strand coverage with a minimum of 2 clones and 2 reads with no ambiguities or 2 chemistries with a minimum of 2 clones and 3 reads with no ambiguities. If the sequence quality for a region does not meet this standard, it will be indicated in the annotation as Low Coverage.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLONE LENGTH: This sequence does not necessarily represent the entire insert of this clone. Overlapping regions of clones are only sequenced and submitted once, so the sequence for the remainder of the insert may be found in the record for the adjacent clones. Overlapping clones are noted at the beginning and end of the Features listing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ANNOTATION OF FEATURES:

STSs are identified using ePCR (Genome Res. 7:541-550) searches of a local database that includes entries from dbSTS, GDB, and local mapping efforts.

Repeats are identified using RepeatMasker (A. Smit and P. Green, unpublished.) for Human and Mouse sequences.

Genes and Region of sequence similarity are identified by BLAST (Nuc. Acids Res. 25:3389-3402) similarity (expect < 1e-34) to the EST and cDNA sequences demonstrate at least two exons flanked by consensus splice sites that maintained sequence continuity across the splice junctions. Sequences that are not identical matches are annotated as similar.
                                                                                                                                                                                                                                                                                                                              Direct Submission
Submitted (30-SEP-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA
On Feb 27, 2002 this sequence version replaced gi:17921172.
INFORMATION: http://www.hgsc.bcm.tmc.edu/ or email
                                                                                                                                                                                             Direct Submission
Submitted (07-MAR-2002) Human Genome Sequencing Center, Department
Modecular and Human Genetics, Baylor College of Medicine, One
Baylor Plaza, Houston, TX 77030, USA

[ (bases 1 to 145390)
                                                              Direct Submission
Submitted (27-FEB-2002) Human Genome Sequencing Center, Department
of Molecular and Human Genetics, Baylor College of Medicine, One
Baylor Plaza, Houston, TX 77030, USA
4 (bases 1 to 145390)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QUALITY OF INDIVIDUAL BASES: This sequence meets stringent quality standards - estimated error rate less than 1 per 10,000 bases. Reports of lowest quality individual bases and measures of baselty are listed below. Description of the metrics can be found
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               http://gc.bcm.tmc.edu:8088/quality.info/genbank.annotation.html.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="overlaps bases 69098. .70998 of clone AC092970"
/function="clone overlap"
complement(7. .619)
/rpt family="LiMi"
  Baylor Plaza, Houston, TX 77030, USA 3 (bases 1 to 145390)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .145390
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="genomic_DNA"
/db_xref="taxon:9606"
/chromosome="3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone="RP11-396A13"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         656. .853
/rpt_family="AluSq"
854. ..885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QUALSTAT-REPORT.
                                                                                                                                                                              Worley, K.C.
                                                                                                                                                                                                                                                                                                               Worley, K.C.
```

ö

Gaps

ö

Indels

Length 145390;

repeat_region repeat_region repeat_region

misc_feature

FEATURES

g ò

```
82864 GGAGTTTCTTCCTTCTGGTGGTTCGTGTCTCACTGGCTTCAGGAGTGAAGCTGCAGAC 82923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           178975 bp DNA linear HTG 17-WAY-2000
Homos sapiens chromosome 7 clone RP11-396A13 map 7, WORKING DRAFT
SEQUENCE, 12 unordered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 GOAGITICITCAITCIGGIAGGITCGIGGICICCIGGCITCAGGAATGAAGGIGIAGAA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 57.2; DB 2; Length 158983;
Pred. No. 4e-06;
0; Mismatches 8; Indels 0;
816 109840: contig of 40025 bp in length 19910: contig of 40762 bp in length 150702: contig of 40762 bp in length 150802: contig of 40762 bp in length 150802: gap of unknown length 152468: contig of 1666 bp in length 15268: gap of unknown length 154401: contig of 1833 bp in length 154501: gap of unknown length 15451: gap of unknown length 156475: contig of 1974 bp in length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of unknown length 15657: gap of un
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8092. .14234
/note="assembly_name:Contigl2"
14335. .28444
/note="assembly_name:Contigl3"
28545. .49191
/note="assembly_name:Contigl4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . . 2675
'note="assembly_name:Contig10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2776. .7991
/note="assembly_name:Contig11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                clone_end:T7 __
vector_side:right"
49292. _69715
/note="assembly_name:Contig15"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 69816. .109840 /
/note="assembly_name:Contig16"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'note="assembly_name:Contig9"
                                                                                                                                                                                                                                                                                                                                       organism="Homo sapiens"
|mol_type="genomic DNA"
|db_xref="taxon:9606"
|chromosome="2"
                                                                                                                                                                                                                                                                                                                                                                                                                                             'clone="RP11-404J16"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AC023222.3 GI:7884386
HTG; HTGS_PHASE1; HTGS_DRAFT.
HOMO sapiens (human)
HOMO sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 88.6%;
Matches 62; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82924 crridcedre 82933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   63 CTCTGCGATG 72
                                                                                                                                                                                 154402
154402
156476
156576
                                                                                                         150803
152469
152569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 10
AC023222
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                 20401 GGAGTTTCTTCCTTCTGGGGTTCGTGGGTTCTCACGGGTTTCAGGAGTGAAGCTGCAGAC 20460
                                                                                                                                                                                                                                                         ווחם 158983 bp DNA linear HTG 18-FEB-2001 bookspiens chromosome 2 clone RP11-404J16, WORKING DRAFT SEGUENCE, 12 unordered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (05-JAN-2000) Genome Sequencing Center, Washington University School of Medicine, 4444 Forest Park Parkway, St. Louis, MO 63108, USA On Peb 18, 2001 this sequence version replaced gi:9858987.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates; Catarrhini, Hominidae, Homo.
1 (bases 1 to 158983)
Waterston, R.H.
Waterston, R.H.
The sequence of Homo sapiens clone
Unpublished
  3 GGAGTITCTICATICTGGTAGGTTCGTGGTCTCTCTGGCTTCAGGAATGAAGCTGTAGAA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    * NOTE: This is a 'working draft' sequence. It currently consists of 12 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2675: contig of 2675 bp in length 2775: gap of unknown length 7991: contig of 5216 bp in length 8091: gap of unknown length 14234: contig of 6143 bp in length 2844: gap of unknown length 28544: gap of unknown length 49191: contig of 20647 bp in length 69715: contig of 20647 bp in length 69715: contig of 206424 bp in length 69715: contig of unknown length 69715: contig of unknown length 69715: contig of unknown length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ----- Genome Center -------
                                                                                                                                                                                                                                                                                                                                                                                                            HTG; HTGS_FHASE1; HTGS_DRAFT; HTGS_FULLTOP.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                           AC020598.6 GI:12963047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 (bases 1 to 158983)
Waterston, R.H.
Direct Submission
                                                                                                                                                  20461 CTTCGCGATG 20470
                                                                                                         CTCTGCGATG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14235
144335
28445
28545
49192
69716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8092
                                                                                                         63
                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                   RESULT 9
AC020598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
```

```
CTTCGCGATG 6165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /map="7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              63 CTCTGCGATG 72
    79319
97950
98050
117962
118062
144167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 11
CNS01DS6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                    District Submission (C., Lander, E., Abraham, H., Allen, N., Anderson, S., Baldwin, J., Barna, N., Beckerly, R., Beda, F., Anderson, S., Baldwin, J., Barna, N., Beckerly, R., Beda, F., Chader, B., Lincon, L., Nusbeum, C., Lander, E., Brown, A., Burkett, G., Castle, A., Choppel, Y., Colangelo, M., Collins, S. Collymore, A., Cooke, P., Choepel, Y., Colangelo, M., Collins, S. Collymore, A., Cooke, P., Choppel, Y., Colangelo, M., Collins, S. Collymore, A., Cooke, P., Choppel, Y., Colangelo, M., Collins, S., Kann, L., Karten, L., Lehcozky, J., Levine, R., Lieu, C., Liu, G., Locke, K., Macdun, J., Connord, J., Lehcozky, J., Levine, R., Lieu, C., Liu, G., Locke, K., McPheeters, R., Maddon, J., Lebcozky, J., Levine, R., Lieu, C., Liu, G., Locke, K., McPheeters, R., Maddon, J., McDean, J., McDhan, J., McDhan, J., McPheeters, R., Maddim, J., McDhan, J., McDhan, J., McDhan, J., McPheeters, R., Savery, P., Spencer, B., Stange-Thomann, N., Pleir, R., Santos, R., Savery, P., Spencer, B., Stange-Thomann, N., Tilled, J., Santos, R., Savery, P., Spencer, B., Stange-Thomann, N., Tilled, J., Connor, Subramanian, A., Talamas, J., Tesfaye, S., Theodore, J., Tircell, A. and Zody, M., Subramanian, A., Talamas, J., Wu, X., Myman, D., Ye, W.J., Zimmer, A. and Zody, M., Viel, R., Vo, A., Wu, X., Myman, D., Ye, W.J., Milled, G., Charles Street, Cambridge, M. A. A. & Green, P. (1996-1997) Stolen of Charles Street, Cambridge, M. Santos, R., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C., Savers, C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NOTE: This is a 'working draft' sequence. It currently consists of 12 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1862: contig of 1862 bp in length
1962: gap of 100 bp
5596: gap of 100 bp
12695: contig of 6399 bp in length
12795: gap of 100 bp
24148: contig of 11353 bp in length
24248: gap of 100 bp
24248: gap of 100 bp
34226: contig of 10178 bp in length
34236: contig of 10178 bp in length
34536: contig of 10178 bp in length
34538: contig of 10312 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100 bp
of 13442 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       in length
                                 Birren, B., Linton, L., Nusbaum, C. and Lander, E. Homo sapiens chromosome 7, clone RP11-396A13 Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          44838: contig of 10312 bp in
44938: gap of 100 bp
58380: contig of 13442 bp in
58480: gap of 100 bp
79218: contig of 20738 bp in
79318: gap of 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11863
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
12663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
```

```
CNSO1DS6

179206 bp DNA linear PRI 18-APR-2002
BAC sequence from the SPG4 candidate region at 2p21-2p22 BAC 367K01
of library CITB_978_SKB from chromosome 2 of Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (base 1 to 179206)
Hazan,J., Fonknechten,N., Mavel,D., Paternotte,C., Samson,D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 GGAGTTTCTTCATTCTGGTAGGTTCGTGGTCTCTCGGCTTCAGGAATGAAGCTGTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 178975;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
0
97949: contig of 18631 bp in length
98049: gap of 100 bp
117961: contig of 19912 bp in length
118061: gap of 100 bp
144166: contig of 26105 bp in length
142266: gap of 100 bp
178975: contig of 34709 bp in length.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 13.6%; Score 57.2; DB 2; Length 1 Best Local Similarity 88.6%; Pred. No. 4e-06; Matches 62; Conservative 0; Mismatches 8; Indel8
                                                                                                                                                                                                                                                                                                            clone end:T7
vector_side:left"
34527. .494818
//note="assembly_fragment"
//note="assembly_fragment"
//note="assembly_fragment"
//note="assembly_fragment"
//note="assembly_fragment"
//note="assembly_fragment"
//note="assembly_fragment"
//note="assembly_fragment"
//note="assembly_fragment"
//note="assembly_fragment"
//note="assembly_fragment"
//note="assembly_fragment"
//note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            118062. .144166
/note="assembly_fragment"
144267. .178975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="assembly_fragment"
                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/chromosome="7"
                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     clone_end:SP6
vector_side:left"
118062. .144166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AL121656.2 GI:7159617
SPG4 genomic DNA interval.
Homo sapiens (human)
Homo sapiens
```

```
repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                    source
                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unbmitted (05-JAN-2001) Sanger Centre, Hinxton, Cambridgeshire, Chine Submitted (05-JAN-2001) Sanger Centre, Hinxton, Cambridgeshire, CBLO 1854, UK. E-mail enquirise: humquery@sanger.ac.uk Clone requests: clonerequest@sanger.ac.uk
On Sep 12, 2000 this sequence version replaced gi:10086005.
During sequence assembly data is compared from overlapping clones. Where differences are found these are annotated as variations together with a note of the overlapping clone name. Note that the variation annotation may not be found in the sequence submission corresponding to the overlapping clone, as we submit sequences with only a small overlap as described above.

The following abbreviations are used to associate primary accession numbers given in the feature table with their source databases:
Em:, EMBL; Sw.; SWISSERCT; Tr.; TREMBL; Wp:, WORWFEP; Information numbers given in the feature table with their source databases:
Em:, EMBL; Sw.; SWISSERCT; Tr.; TREMBL; Wp:, WORWFEP; Information the library Genome Systems Released VECTOR: pBeloBACII This sequence is the entire insert of clone GSI-204II2 This sequence has been finished according to sequence map criteria as follows. An attempt is made to resolve all sequencing problems, such as compressions and repeats, but not necessarily within known annotated repeat sequence elements. Where the sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 107000 GGAGTTTCTTCTTCTGGTGGGTTCGTGGTCTCACGGCTTCAGGAGTGAAGCTGCAGAAC 107059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AL133383 204158 bp DNA linear PRI 04-APR-2001 Human DNA sequence from clone GSI-204112 on chromosome 1. Contains ESTs, STSs and GSSs. Contains a novel gene, complete sequence.
                                                                           Spastin, a novel AAA protein, is altered in the most frequent form of autosomal dominant spastic paraplegia Nat. Genet. (1999) In press 2 (benoscope.) Genoscope.
                                                                                                                                                                                                                                       Submitted (18-APR-2002) Genoscope - Centre National de Sequencage : BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr - Web : www.genoscope.cns.fr)
On Mar 6, 2000 this sequence version replaced gi:6981752.
1. .179206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryoča; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 204158)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 GGAGTITCTTCATTCTGGTAGGTTCGTGGTCTCTGGCTTCAGGAATGAAGCTGTAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
Artiguenave, E., Davoine, C.S., Cruaud, C., Durr, A., Wincker, P.,
Brottier, P., Cattolico, L., Barbe, V., Burgunder, J.M.,
Prud'Homme, J.F., Brice, A., Fontaine, B., Heilig, R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 179206;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 57.2; DB 9;
Pred. No. 4e-06;
0; Mismatches 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone="367K01"
/clone_lib="CITB_978_SKB"
                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/chromosome="2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AL133383.10 GI:10119658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               107060 cirricceric 107069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                  Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCTGCGATG 72
                                                                        Weissenbach, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     63
                                                                                                                                                                                                                                                                                                                                                                 SOUTCOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 12
AL133383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                        AUTHORS
                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                             COMMENT
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                             TITLE
                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DRIGIN
```

셤 ģ 셤

ઠે

```
11160. .11284
| Indice="Tigger3" (Golem) repeat: matches 1. .125 of consensus"
| 11348. .11672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            / Anote="Mixed repeat: matches 278. 780 of consensus"
// hote="Mixed repeat: matches 278. 780 of consensus"
// hote="HERVL repeat: matches 2899. 4004 of consensus"
// hote="HERVL repeat: matches 2335. 2589 of consensus"
// hote="HERVL repeat: matches 1. 53 of consensus"
// hote="Mixed repeat: matches 1. 53 of consensus"
// hote="Mixed repeat: matches 1. 53 of consensus"
// hote="Mixed repeat: matches 1. 136 of consensus"
// hote="AluJo repeat: matches 1. 136 of consensus"
// hote="AluJo repeat: matches 1. 136 of consensus"
// hote="Tigger3 (Golem) repeat: matches 2771. 3027 of
ambiguous, there is an annotation using the 'unsure' feature key. This sequence was generated by the Sanger Centre from part of a human chrowsome 1 bacterial clone contig constructed by John Carpten et al. NHGRI, NHH. Further information can be found at http://www.sanger.ac.uk/HGP/Chrl.

Location/Qualifiers

1. 204158

/organism="Homo sapiens"
/db_xref="teamonic DNA"
/db_xref="teamonic DNA"
/chromosome="1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="MIR repeat: matches 4. .92 of consensus"
11798. .12173
12188. .12287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="L1ME2 repeat: matches 5609. .6131 of consensus"
1917. . 19358
/note="15 copies 4 mer tata 75% conserved"
19391. .19835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12471. .16388 | Appear: matches 2293. .6155 of consensus | Anote="Lip5 repeat: matches 2293. .6155 of consensus | Anote="Li repeat: matches 2693. .2750 of consensus | 18264. .18563 | Anote="AluSq repeat: matches 1. .300 of consensus | Anote="AluSq repeat: matches 1. .300 of consensus | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote | Anote |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2276. .2574
/note="AluSx repeat: matches 9 .303 of consensus"
2720. .2870
/note="L2 repeat: matches 2558 .2711 of consensus"
4330. .4437
/note="MER94 repeat: matches 10 .121 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     note="AluJb repeat: matches 1. .310 of consensus" 1707. .11794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .235 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      908. .2053
note="FAM repeat: matches 26. .172 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5066. .5201
/note="MIR_repeat: matches 7. .140 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tatacata 85% conserved"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       313. .989
/note="numzaa repeat: matches 5406. .6152 of
1047. .1513
/note="match: GSS: Em:AQ819686"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              conserved"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             256. .301
/note="23 copies 2 mer at 80% conserved"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  copies 2 mer tt 91% conserved"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone_lib="Genome_Systems_Releasel"
7. .442
/note="match: GSS: Em:AQ761971"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          245. .300
//note==11 copies 4 mer tata 73%
251. .298
/note="6 copies 8 mer tatacata 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  note="MIR repeat: matches 138.
2471. .16388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                clone="GS1-204112"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4758. .4793
/note="18 co
```

```
Direct Submission
Submitted (21-DEC-1999) Department of Genetics, Washington
University, 4444 Forest Park Avenue, St. Louis, Missouri 63108,
6 (bases 1 to 75609)
Waterston,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (18-MAR-1999)
University, 4444 Forest
5 (bases 1 to 75609)
Waterston, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        155842 CTTTGCGGTG 155851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63 CTCTGCGATG 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
      repeat_region
                                                             repeat_region
                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
AC006456
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note="Tigger3 (Golem) repeat: matches 1. .108 of consensus" 7039. .37745
                                                                                                                                                                      20153. .20452
/note="THEIC repeat: matches 79. .371 of consensus"
20453. .21357
/note="LiD repeat: matches 2739. .3657 of consensus"
21330. .21610
/note="LiM4 repeat: matches 4033. .4299 of consensus"
21611. .21907
/note="AluY repeat: matches 1. .298 of consensus"
21908. .22023
/note="LiM4 repeat: matches 3915. .4033 of consensus"
220513. .22639
/note="LiM4 repeat: matches 3915. .4033 of consensus"
20513. .22640
         .5581 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1380. 128818

Thote="LTRA4 repeat: matches 25. .519 of consensus"

1830. 120139

Thote="Alub repeat: matches 1. .308 of consensus"

19145. .30686

Thote="LIM4 repeat: matches 2328. .3854 of consensus"

10748. .31111

Thote="THRIB repeat: matches 1. .364 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat: matches 5655. .6143 of consensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note="32 copies 2 mer aa 82% conserved"
5625. .27912
note="MER31-internal repeat: matches 3177. .4880 of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24674. .24740
/note="MERS1-internal repeat: matches 1581. .1971 of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             note="Tigger3 (Golem) repeat: matches 2277. .3027 of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat: matches 76. .414 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .2492 of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note="MERSBA repeat: matches 1. .224 of consensus" 2037. .42383 note="LIR37A repeat: matches 76. .414 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             note="12 repeat: matches 1162. .1576 of consensus"
1401. .41633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3591. .33698
note="MIR repeat: matches 33. ,141 of consensus"
4045. .34274
note="MIR repeat: matches 2. ,262 of consensus"
5105. .35568
note="MLTIC repeat: matches 1. ,466 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2640. .33010
note="THE1B repeat: matches 1. .364 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1112. 32639
note="THE1B-INTERNAL repeat: matches 1. 1580 of
                                                                                                                        .1580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  note="14 copies 2 mer tt 92% conserved"
12922. 22969
17012-24 copies 2 mer tt 79% conserved"
14230. 24396
17012-24396
17012-24396
17012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37012-37
/note="LIME2 repeat: matches 5135. .5581 of complement(19811. .20532)
/note="match: GSS: Em:AQ283704"
19948. .20130
/note="THE1-INTERNAL repeat: matches 1398.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  complement (44858. .45350)
//note="match: 6SS: Em:AAS28681"
complement (45342. .45500)
/note="match: GSS: Em:AQ149065"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             :omplement(44109. .44432)
note="match: GSS: Em:B35062"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             complement (44109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15057. .25536
note="L1PA5 x
                                                                                                                                                       onsensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "susasasus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nsensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            onsensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nsensus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                         repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                               repeat_region
                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                       repeat_region
                                                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              misc_feature
                                    misc_feature
```

```
75609 bp DNA linear PRI 26-APR-2003
AC006456
AT006456 GI:21322189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (28-JAN-1999) Genome Sequencing Center, Washington University School of Medicine, 4444 Forest Park Parkway, St. Louis, Mo 53108, USA (bases 1 to 75609) Waterston, R.
/ A5661. .46730
// note="WERRIC repeat: matches 1. .1071 of consensus"
47237. .47615
// A7659. .48158
// note="WERRIC repeat: matches 1. .426 of consensus"
// note="WERRIA repeat: matches 1. .426 of consensus"
// note="WERRIA repeat: matches 1. .554 of consensus"
// note="WERRIA repeat: matches 53. .262 of consensus"
// note="WIR repeat: matches 53. .262 of consensus"
// note="WIR repeat: matches 4. .192 of consensus"
// note="WIR repeat: matches 4. .192 of consensus"
// note="WIR repeat: matches 5992. .6143 of consensus"
// note="L2 repeat: matches 2541. .2703 of consensus"
// note="L2 repeat: matches 2541. .2703 of consensus"
// note="L2 repeat: matches 14. .115 of consensus"
// note="WIR repeat: matches 14. .115 of consensus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 GGAGITICITCATICIGGIAGGIICGIGGICTCTCTGGCTICAGGAAIGAAGCTGTAGAA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

1 (bases 1 to 75609)

Sulston, J. E. and Waterston, R.

Toward a complete human genome sequence
Genome Res. 8 (11), 1097-1108 (1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 204158;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
13.6%; Score 57.2; DB 9; Length 20
Best Local Similarity 88.6%; Pred. No. 4e-06;
Matches 62; Conservative 0; Mismatches 8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 (bases 1 to 75609)

Bauer, C., Ozanich, A. and Sandberg, B.

The sequence of Homo sapiens PAC clone RP5-969D4
Unpublished (2001)
3 (bases 1 to 75609)
Waterston, R.H.
```

Washington Missouri 63108, USA

Department of Genetics, Park Avenue, St. Louis,

COMMENT

```
repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                       repeat_region
                                                                                                                                                                                                                                                                 repeat_region
                                                                                                                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               variation
                                                                                                                                             variation
                                                                                                                                                                                                                                                                                                                                                                                                                                    variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  variation
                                                                                                                                      Direct Submission
Submitted (26-APR-2003) Department of Genetics, Washington
University, 4444 Forest Park Avenue, St. Louis, Missouri 63108, USA
University, 4444 Forest Park Avenue, St. Louis, Missouri 63108, USA
On Jun 4, 2002 this sequence version replaced gi:4454519.
Center: Mashington University Genome Sequencing Center
Center code: WUGSC
Web site: http://genome.wustl.edu/gsc
Contact: sapiens@watson.wustl.edu
Center project name: H_DJ0969D04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAPPING INFORMATION:

The sequence of this clone was established as part of a mapping and sequence of this clone between the NGCRI Chromosome 7 Mapping sequencing collaboration between the NGCRI Chromosome 7 Mapping Project (Exic D. Green, Director), John D. McPherson in the Department of Genetics (Washington University), and the Washington University Genome Sequencing Center. For additional information about the map position of this sequence, see http://www.nhgri.nih.gov/DIR/GTB/GRR7, send mailto:egreen@nhgri.nih.gov, or see http://genome.wustl.edu/gsc
   Direct Submission
Direct Governor 003 Department of Genetics, Washington
University, 4444 Forest Park Avenue, St. Louis, Missouri 63108, USA
7 (bases 1 to 75609)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This clone was derived from human PAC library RPCI-4, prepared by Pieter de Jong and coworkers at http://www.chori.org using the method described by loannou et al., Nature Genetics 6:84-9 (1994). The library is from one male donor.

The clone may be obtained either from Genome Systems, Inc. (http://www.genomesystems.com) or Research Genetics, Inc. (http://www.respen.com); or from Pieter de Jong.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NEIGHBORING SEQUENCE INFORMATION:
The clone sequenced to the left is H DJ0558110, 200 bp overlap.
Actual start of this clone is at base position 75969 of RP4-558110
actual end is at base position 75609 of RP5-96904.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NOTICE: This sequence may not represent the entire insert of this folms. It may be shorter because we only sequence overlapping clone sections once, or longer because we provide a small overlap between neighboring data submissions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This sequence was finished as follows unless otherwise noted: all regions were double stranded, sequenced with an alternate chemistry, or covered by high quality data (i.e., phred quality >= 30; an attempt was made to resolve all sequencing problems, such as compressions and repeats, all regions were covered by sequence from more than one subclone; and the assembly was confirmed by restriction digest.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .75609
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db xref="taxon:9606"
/chromosome="7"
/chmosome="7"
/clone="RP5-969D4"
/clone="RP5-969D4"
/clone="RP5-969D4"
/clone="RP5-969D4"
/clone="RP5-969D4"
/clone="RP5-969D4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /allele="G"
/allele="A"
/db xref="dbSNP:1544590"
1026. .1110
/rpt_family="GA-rich"
1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE INFORMATION:
                                                                                                             Waterston, R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      variation
                                                                                                                    AUTHORS
TITLE
JOURNAL
TITLE
JOURNAL
                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
```

```
/allele="A"
/db_xref="dbSNP:1544591"
1113. .1256
/rpt_family="A-rich"
                                                                       /allele="T"
/db xref="dbSNP:2537200"
1507. .1528
/xpt_family="AT_rich"
1928. .2057
/xpt_family="L1"
3052. .3266
/xpt_family="Alu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                    /dleare="T"
/db xref="dbSNP:768817"
5477. .5678.
/rpt family="L1"
5579. .5973
/rpt family="L1"
5974. .6098
/rpt family="L1"
/rpt family="L1"
/rpt family="L1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /allele="G"
/allele="A"
/db_xref="dbSNP:726750"
6737. :6845
/rpt_family="L1"
                                                                                                                                                                                                                                                                                                                              /allele="C"
/allele="T"
/db_xref="dbSNP:957279"
5067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /allele="T"
/allele="A"
/db_xref="dbSNP:726749"
6598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /allele="C"
/allele="A"
/db.xref="dbSNP:2727632"
                                                                                                                                                                                                  /allele="A"
/db_xref="dbSNP:2727626"
:887
                                                                                                                                                                                                                                                            /db_xref="dbsNP:2727625"
4632
                                                                                                                                                                                                                                                                                                    /allele="T"
/db_xref="dbSNP:2727624"
191<del>4</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /allele="C"
/db_xref="dbSNP:726751"
7861
                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="dbSNP:768816"
5080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8094. .8163
/rpt_family="AcHobo"
8463. .8511
/rpt_family="AT_rich"
10046
/allele="A"
                                                                                                                                                                                                                                                                                                                                                                                         /allele="C"
/allele="T"
                                                                                                                                                                                                                                       'allele="T"
'allele="C"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /allele="T"
                                                                                                                                                                                       allele="G"
                                                                                                                                                                                                                                                                                         'allele="A"
                                                                                                                                                                                                                                                                                                                                                                                                                                           allele="C"
                                                              'allele="C"
```

```
Center: neconstruction of the code: WIGSC
Web site:http://genome.wustl.edu/gsc/index.shtml
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21619 ccrrrdccdrdrr 21631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 ACTCTGCGATGCT 74
                                                                                                                                       1523
1623
1623
1623
16537
16116
13216
23382
2482
2482
2481
24811
3261
42312
68072
68072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
AC147084/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Enkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Enkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
En (Dases 1 to 172464)

DOE Joint Genome Institute.
Sequencing of Human Chromosome 16
Li Onpublished
Does 1 to 172464)
Does Joint Genome Institute.

Does Joint Genome Institute.

Direct Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submission
Li Object Submis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AC140889 172464 bp DNA linear HTG 05-MAR-2003
Homo sapiens chromosome 16 clone RP11-171G19, WORKING DRAFT
STOORDE, 10 unordered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Summary Statistics
Consensus quality: 167507 bases at least Q40
Consensus quality: 168805 bases at least Q20
Consensus quality: 168805 bases at least Q20
Consensus quality: 165686 bases at least Q20
Estimated insert size: 175000; agarose-fp estimation
Estimated insert size: 171564; sum-of-contigs estimation
Quality coverage: 6.0 in Q20 bases; agarose-fp estimation

* NOTE: This is a 'working draft' sequence. It currently

* Consists of 10 contigs The true order of the pieces

* is not known and their order in this sequence record is

* arbitrary. Gaps between the contigs are represented as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 IGGAGITICITCATICIGGIAGGITCGIGGTCTCTCTGGCTTCAGGAATGAAGCTGTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 75609;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 13.5%; Score 57; DB 9; Length 756 Best Local Similarity 86.3%; Pred. No. 4.7e-06; Matches 63; Conservative 0; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AC140889
AC140889.1 GI:28850000
HTG; HTGS_PHASE1; HTGS_DRAFT; HTGS_ACTIVEFIN.
HTGS PHASE1; HTGS_DRAFT; HTGS_ACTIVEFIN.
Homo sapiens (human)
Homo sapiens
Chordata; Craniata; Verte
/allele="G"
/db xref="dbSNP:2537199"
10459. 10758
/rpt family="Alu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Center Project Name: 472192
Center clone name: RPCI-11_171G19
                                                                                                                                                                                                                                                    /rpt_family="ERV1"
13686. 13848
/rpt_family="ERV1"
14311. .14339
/rpt_family="TTTTG]n"
14516. .14702
/rpt_family="TTTTG]
16054. .16353
                                                                                                                                       /allele="G"
/allele="A"
/db_xref="dbSNP:887689"
12749. .13573
/rpt_family="ERV1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12938 CCTTTGCGGTGTT 12950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Project Information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62 ACTCTGCGATGCT 74
                                                               repeat_region
                                                                                                                                                                                                                      repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                              repeat_region
                                                                                                                  variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 14
AC140889
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
```

g ð

```
Process From Manager Process Act 198154122

HTGS PHASE1.
FTG PHASE1.
FTG PHASE2.
FTG PHASE2.
FTG PHASE2.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE3.
FTG PHASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21559 TGGAGTTTCTTCTTCTGCGGGGTTCGTGGTCTCGCTGACTTCAGGAATGAAGCTGCAGA 21618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AC147084
Pan troglodytes chromosome 7 clone RP43-64A1, *** SEQUENCING IN PAGESSS ***, 9 unordered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 recadification recognation of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast of the contrast o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 13.5%; Score 57; DB 2; Length 172464; Best Local Similarity 86.3%; Pred. No. 4.6e-06; Matches 63; Conservative 0; Mismatches 10; Indels 0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Center: Washington University Genome Sequencing Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1522: contig of 1522 bp in length 1523 | 1622; gap of unknown length 1523 | 1622; gap of unknown length 1523 | 1622; gap of unknown length 1523 | 1635; gap of unknown length 1536 | 13315; contig of 3301 bp in length 1537 | 13315; contig of 6479 bp in length 1536 | 13315; gap of unknown length 1536 | 13315; gap of unknown length 1538 | 13415; gap of unknown length 1538 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 13416 | 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .172464
/organism="Homo sapiens"
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/chromosome="lf6"
/clone="RP11-171G19"
/clone_lib="RPCI human BAC library 11"
```

```
NOTE: This is a 'working draft' sequence. It currently consists of 9 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13.5%; Score 57; DB 2; Length 174895; 86.3%; Pred. No. 4.6e-06; ive 0; Mismatches 10; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92622; gap of unknown length
623 170864; contig of 78242 bp in length
865 170864; gap of unknown length
172086; contig of 1122 bp in length
187 172186; gap of unknown length
187 173478; contig of 1292 bp in length
187 173478; contig of 1292 bp in length
187 173485; contig of 1292 bp in length
187 173478; contig of 1292 bp in length
187 174895; contig of 1317 bp in length
18805; contig of 1317 bp in length
18805; contig of 1317 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2971: contig of 2971 bp in length
3071: gap of unknown length
12999: contig of 9928 bp in length
13099: gap of unknown length
30461: contig of 17362 bp in length
30561: gap of unknown length
60139: contig of 29578 bp in length
60239: gap of unknown length
60239: contig of 32283 bp in length
                                                                   Sequencing vector: M13; 0%
Sequencing vector: plasmid; 100%
Chemistry: Dye-primer ET; 0% of reads
Chemistry: Dye-terminator B19 Dye; 100% of reads
Assembly program: Phrap; version 0.990319
Consensus quality: 171368 bases at least Q40
Consensus quality: 177399 bases at least Q20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              072. .12999
note="assembly_name:Contigl1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3100. .30461
note="assembly_name:Contig12"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0240. .92522
note="assembly_name:Contig14"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note="assembly_name:Contigl3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    note="assembly_name:Contig10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         note="assembly_name:Contig8"
[73579. .174895]
note="assembly_name:Contig9"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       note="assembly_name:Contig7" 72187. .173478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'organism="Pan troglodytes"
|mol_type="genomic DNA"
|db_xref="taxon:9598"
                                                  ----- Summary Statistics
Center project name: C_PT064A01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  clone="RP43-64A1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 13.5
Best Local Similarity 86.3
Matches 63; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
```

```
|| || || || || 131827
       셤
```

Search completed: April 25, 2004, 18:58:19 Job time : 1113.58 secs

131899 TGGAGTTTCTTCTTCTTGGTGGSTTCGTGGTCTCGCTGACTTCAGGAATGAAGCTGCAGA 131840

a

62 ACTCTGCGATGCT 74

2 TGGAGTTTCTTCATTCTGGTAGGTTCGTGGTCTCTCTGGCTTCAGGAATGAAGCTGTAGA 61

0; Gaps

AW179297 PW3-ST011
AW179289 PW3-ST011
AW179289 PW3-ST011
AW179289 PW3-ST011
BE866341 601678994
BE866341 601678994
BE866341 601678994
BE86439616 602441635
AW205598 ZG66401.8
Z98443 HS238443 DK
AW969584 EST381664
BE564550 601343885
AW969584 EST381661
CR163866 K-EST0224
CR312517 UL-CF-FNO
AW182649 X145806.X
BW182649 X145806.X
BW182649 X145806.X
BW182649 X145806.X
BW182649 X145806.X
BW182649 X145806.X
BW182649 X145806.X
BW182649 X145806.X
BW182649 X145806.X
BW182649 X145806.X
BW182810 VY72G44.X
AW182810 VY72G4.X
AW182810 VY72G4.X
AW182810 VY72G4.X
AW182810 VY72G4.X
AW182810 VY72G4.X
AW182810 WM3-C11020
BW182810 WM3-C1103 X
AW1821951 XM8-CHT020
BW182810 WM3-C1103 X
AW192219 WM3-C1103 X
AW192219 WM3-C1103 X
AW192219 WM3-C1103 X
AW192219 WM3-C1103 X
AW192219 WM3-C1003 X
AW192219 WM3-C1003 X
AW192219 WM3-C1003 X
AW1923894 WM3-D6003 X
AW3-Z199 XM3-GENOS X
AW3-Z199 XM3-Z109 XM3-C2003 X
AW3-Z199 XM3-Z109 XM3-C2003 X
AW3-Z199 XM3-Z109 XM

Z98443 AW969587 BE564550 AW969584 CA162866 CA12171 AW080593 AW080593 AW102669 AM1026693 AM1026693 AM1026693 AM1026693 AM1026693 AM10257 AM102810 AM102810 AM1022919 AW662716 BF7155944 AM662716

6623 6623

```
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                  RESULT 1
BG431098
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                    April 25, 2004, 07:00:48; Search time 2937.54 Seconds (without alignments) 16458.288 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                     1 ttaatctacatatcttatgt.......1ttatttaaaaatttaaaa 1619
        GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                          27513289 seqs, 14931090276 residues
                                                                                                                                                       of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                      nucleic search, using sw model
                                                                                                                   IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                     em_estba:*
em_estin:*
em_estin:*
em_estin:*
em_estro:*
em_estro:*
em_estro:*
gb_esti:*
gb_esti:*
gb_esti:*
em_gb_esti:*
em_gsi:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
em_gss_hum:*
                                                                                                                                                                                                                                                                                                                                                                                                         em_gss_mam:
em_gss_mus:
em_gss_pro:
em_gss_rod:*
em_gss_rod:*
                                                                                                                                                                        Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                    US-10-051-835-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query
Match Length DB
                                                                                                                                                                                                                                EST:*
                                                                                                                                                                                                                                                                                                                    Perfect score:
                                                                                                                   Scoring table:
                                                                                                                                                          rotal number
                                       nucleic
                                                                                                     Seguence:
                                                                                                                                           Searched:
                                                                                                                                                                                                                                Database
                                                      Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Result
No.
```

AW511951 AIS00615 AA862938 AI474738 AA570161 AI928006

10

99999

Entaryota, Metazoa; Chordata, Craniata, Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1. (bases 1 to 772)
National Institutes of Health, Mammalian Gene Collection (MGC)
Lupublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: CLONTECH Laboratories, Inc.
cDNA Library Preparation: CLONTECH Laboratories, Inc.
cDNA Library Preparation: CLONTECH Laboratories, Inc.
CDNA Library Preparation: CLONTECH Laboratories, Inc.
cDNA Library Preparation: CLONTECH Caboratories, Inc.
CLONG distribution: MGC Glone distribution information can be found through the I.M.A.G.B. Consortium/LLNL at:
Clone distribution: MGC Clone distribution information can be found through the I.M.A.G.B. Consortium/LLNL at:
High quality sequence stop: 735. PG431098 172 bp mRNA linear EST 14-MAR-2001 602498723F1 NIH_MGC_75 Homo sapiens cDNA clone IMAGE:4612420 5', mRNA sequence. BG431098 BG431098.1 GI:13337604 Homo sapiens (human) Homo sapiens

BG431098 602498723 BU681294 UI-CF-EC1 AG165287 Pan trog1 CA312303 UI-CF-FN0

BG431098 BU681294 AG165287 CA312303

38.0 37.9 37.1

615 613.8 600.2 577.6

000

Score

Description

ALIGNMENTS

```
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                   Contact: McCray, PB
                                                                                                                                                                                                                                                                                                                                McCray Lab
                                                                                                                                                                                                                                                              discovery
                                                                                                                                                                                                                                                                                     97044477
                                                                                                                                                                                                                                                                                                     8889548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                 713
                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                  BU681294/c
                                                                                    LOCUS
                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                       JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                          1108 TITCGGCATCGCATGTTAGAATCTCTAAAATTTAAACA-TTCCTGTTAAATGACTAAGGT 1166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TIGCTITIATCAATATGAATTCTGAAGGCCAATATCATACCATTAACTATGAAAGCTTTT 1226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCATTIAICAGGICTAAIGAAACCAAIAIIGAAICTCIGAIAAAIATTTTTCIGAIGITAC 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1048 TAGCTATGGGAAATTAGAACTGGCACAACCCTGACATTACTAAGTGGAAATGTTAGGATT 1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       476 GCATTTATCAGGICTAATGAAACCAATATTGAATCTCTGATAATATTTTCTGATGTTAC 535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      508 GTAGATTAAAGTGTGCATTCTTTGTTTTCCTAAAATATGATTTTACTGCTTGAAATTACAT 567
                                                                                                                                                                                                                                                                                                                                                                                   TIGAGIIGAAGIIIAGAAACIAACAIAGCAIIAAIAAIAIGAAIAAIGCAIGGAAAAIIAIIA 627
                                                                                                                                                                                                                                                                                                                                                                                                              TIGAGITIGAGITITAGAAACITAACATAGCATTAATATGAATAAT-CATGGAAAATTATTA 118
                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTTTGAAAACTGATTGATAAATATATTCCCCCTCCTTTAGAAACAGTCAAAAGCCACT 687
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAAACAAGTTTCAAAATAAAGGAAGGTAGCAAGTTAGGCGATGGATTATATTTTCTTGG 747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCAAACAAGTTTCAAAATAAAGGAAGGTAGCAAGTTAGGCGATGGATTATATTTTTTT-G 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTIGITGIATACCCATTGGCCAGGGCCTTTATAAGGACTCCCAAAAGCATTTTGAAGAAT 807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              238 CTIGTTGTATA-CCAGTTGTCAAGGACATTATAAGGACTCCCAAAAGCATTTTGAAGAAT 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCAATATCAAATAAGIGTAIGTCCTCTCAAAIGAGGCATTTTTAATTGTTACAATCTAT 867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 297 GGCAATATCAATAAGTGTATGTCCTCTCAAATGAGGCATTTTTAATTGTTAAAATCTAT 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TIGGACGCTCAGGITATGATATGATATGAAAATAAGCTTCATTATTTCTTATAGCTAC 927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            357 TTGGACGCTCAGGTTATGATATGTTTATGAAAAATAAGCTTCATTATTT-TTATAGCTAC 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   928 ATCCTATTATTCCCTTTTAGAAACAAGAATAACAATAAGTTTTAATAGTTGCCATACTTA 987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            416 Arccrarratrocorrrragaaacaagaaraacaaraagrrrraaragrrgccaracrra 475
                                                                                                                                                                                                                                                                                                                                                        გ
ტ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          595 Tricogcarcecarginagaarciciaaaarrinaaacarriccigiraaargacraaggr
                                                                                                                                                                                                                                                                                                                                                      1 GTAGATTAAAGTGTGCATTC-TTGTTTCCTAAAATATGATTTTACTGCTTGAAATTACAT
                                                                                                                                                                                                                                                                                                     10;
                                                                                                                                                                                                                                                                           Length 772;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGCTCTCCTA 1271
                                                                                                                                                                                                                                                                                                    25; Indels
                                                                                                                                                                                                                                                                          38.0%; Score 615; DB 12;
llarity 95.4%; Pred. No. 1.2e-114;
Conservative 0; Mismatches 25;
    Location/Qualifiers
                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                     Matches 730;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              868
                                                                                                                                                                                                                                                                                                                                                                                      568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1167
                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         988
                                                                                                                                                                                                                                                                                                                                                                                                                                          628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         808
                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                          Local
                     source
     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ,
D
                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                8 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ठे हे ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       සු ද
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
```

```
/u.r.forganism="Homo sapiens"
//wol_type="mRNA"
//wol_type="mRNA"
//do.txef="texcon:9606"
//clone="tre-Er-Excl-abv-i-02-0-UI"
//tissue_type="Lung" abv-i-02-0-UI"
//dev_stage="Adult and Fetal"
//dev_stage="DH10B (Life Technologies) (Tl phage resistant)"
//dore lib="UI-CF-ECI"
//lone lib="UI-CF-ECI"
//lone lib="UI-CF-ECI"
//lone lib="UI-CF-ECI"
//lone lib="UI-CF-ECI"
//lone lib="UI-CF-ECI"
//lone lib="UI-CF-ECI"
//lone lib="UI-CF-ECI"
//lone lib="UI-CF-ECI"
//lone lib="UI-CF-ECI"
//lone lib="UI-CF-ECI"
//lone lib="UI-CF-ECI"
//lone lib="UI-CF-ECI"
//lone lis a normalized CDNA library containing the following tissue(s): Normal lung from adult and from fetal day 64, day 87, week 19 and week 42. The library was constructed according to Bonaldo, Lennon and Soares, Genome Research, 6.791-806, 1996. First strand CDNA synthesis was primed with an oligo-dT primer containing a ladator, digested with Not I, and cloned directionally into pyTyT-Pac vector. The oligonucleotide used to prime the synthesis of first-strand cDNA contains a library tag sequence that is located between the Not I site and the lange-Text.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mocrasty Lab
University of Iowa
University of Iowa
University of Iowa
2024 University of Iowa Med Labs, Iowa City, IA 52242, USA
2024 University of Iowa
2024 University of Iowa
2024 University of Iowa
Tel: 319 356 4866
Fax: 319 356 7171
Email: paul-mccray@uiowa.edu
Tissue Procurement: Dr. M. J. Welsh, University of Iowa
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Researchers may obtain clones from Research
Genetics (www.resgen.com) or from Open Biosystems
(www.openbiosystems.com)
The following repetitive elements were found in this CDNA
sequence: 1-35, AT_rich#Low_complexity
Seq primer: M13 FORWARD
POLYA=Yes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAG TISSUE=Normal Lung Epithelial Cells Tissue nos 369-371
and 380-383
                EST 07-0CT-2002
                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrini; Hominidae; Homo. I (bases I to 745), Bonaldo, M.F., Lennon, G. and Soares, M.B.
BU681294 1745 bp mRNA linear EST 07-OK UI-CF-EC1-abv-i-02-0-UI.sl UI-CF-EC1 Homo sapiens cDNA clone UI-CF-EC1-abv-i-02-0-UI 3', mRNA sequence.
BU681294.1 GI:23531067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 745;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              37.9%; Score 613.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genome Res. 6 (9), 791-806 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
1. .745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rag_seq=aagtgcttac"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAG_LIB=UI-CF-EC1
```

us-10-051-835-15.rst

```
2 (bases 1 to 685)
Pujiyama,A., Hattori,M., Toyoda,A., Taylor,T.D., Yada,T.,
Totoki,Y., Watanabe,H. and Sakaki,Y.
Direct Submission
Direct Submission
Direct Submission
Direct Submission
Old-102-MUG-2001) Asao Pujiyama, The Institute of Physical
and Chemical Research (RIKEN), Genomic Sciences Center (GSC);
1.7-22 Suehiro-chou,Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
1.7-22 Suehiro-chou,Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
CE-mail:chimpbeseger.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/,
Tel:81-45-503-9111, Fax:81-45-503-9170)
Clones are derived from the chimpanzee BAC library RPCI-43 This BAC
end was generated during the R&D process and may have higher chance
of clone tracking errors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1020 ATCTCTGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCT 1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               446 AATAAGCTTCATTATTT-TTATCGCTACATCCTATTATTGCCTTTTAGAAACAAGAATAA 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           624 AGTTAGGCGATGGATTATATTTTTTT-GCTTGTTGTATA-CCAGTTGTCAAGGACATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1140 TAAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCATACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTTAGAGATATTCAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGGACTCCCAAAAGCATTTTGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840 TGAGGCATTTTTAATTGTTACAATCTATTTGGACGCTCAGGTTATGATATGTTATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  506 TGAGGCATTTTTAATTGTTAAAACCTATTTGGACCCTCAGGTTATGATATGTTTATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900 AATAAGCTTCATTATTTCTTATAGCTACATCCTATTATTCCCTTTTAGAAACAAGAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAATAAGTTTTAATAGTTGCCATACTTAGCATTTATCAGGTCTAATGAAACCAATATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACATTACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                207 TAAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720 AGTTAGGCGATGGATTATATTTTCTTGGCTTGTTGTATACCCATTGGCCCAGGGCCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .685
/organism="Pan troglodytes"
/mol_type="caxon:9598"
/clone="RP43-032L08.T7"
/sex="male"
/coll_type="lymphocytes"
/clone_lib="RPCI-43 Chimpanzee Male BAC Library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 37.1%; Score 600.2; DB 29; Length 685; Best Local Similarity 96.1%; Pred. No. 1.2e-111; Matches 647; Conservative 0; Mismatches 23; Indels 3;
                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                   : pBACe3.6
: EcoRI
                                                                                                                                                                                                                                                                                                        ECORI
                                                                                                                                                                                                                                Sequencing: T7
LIBRARY
                                                                                                                                                                                                                                                                       Vector R.Site 1 : R.Site 2 :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                               source
           REFERENCE
AUTHORS
                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  के वि के
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1531 ACCCAAGTGAAGTGAATATAAGCAAAATGTGTTTGTATCCAGAGTCTTCCTGTCATTG 1590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AG165287 685 bp DNA linear GSS 09-JAN-2002
Pan troglodytes DNA, clone: RP43-032L08.T7, genomic survey
sequence.
                                                                                                                                                                                                      1050
                                                                                                                                                                                                                                                                       1110
                                                                                                                                                                                                                                                                                                                                         1170
                                                                                                                                                                                                                                                                                                                                                                                                              1230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAACTGGATAGATCACGTACGTGGTGATCATAACCACTTGGTACTACACCCCAGAAACTCA 1470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1471 AAATTGTCTTTTCTCCTGATGAGATATGGGGTGTCCTTTTGTACGTCTAGGGCCTAGGGT 1530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITATGACACAAATICACTAGTCTGGTTTAAAAATGAAATCTTTATATTGACTGGGTGTC 1350
                               œ
                                                               930
                                                                                                                                 990
                                                                                                                                                                   627
                                                                                                                                                                                                                                     567
                                                                                                                                                                                                                                                                                                          507
                                                                                                                                                                                                                                                                                                                                                                             447
                                                                                                                                                                                                                                                                                                                                                                                                                                               387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              268 CCACATATTTCAGTAATTTCTGTTATGAGAGGACTTGAAATAGCAAATTG-CCACACAGT 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               209 TAACTGGATAGACCACGTACGTGGTGATCATAACCACTTGGTACTACACCCAGAAACTCA 150
                                                                                              687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pan troglodytes (chimpanzee)
Ban troglodytes
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       386 CCTAAAAATAGTITTAGAGATATTCAAGCAATGCTCTCCTAATATCCATACGCAAGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             326 TITATGACACAAAITCACTAGICT-GITIAAAAAIGAAITCTITAIAATGACT-GGIGIT
                                                                                                                                                                                                                                    626 TITATCAGGICTAATGAAACCAATATTGAATCTCTGATAAATATTTTCTGATGTTACTAG
                                                                                                                                                                                                                                                                                                                                             CGGCATCGCATGTTAGAATCTCTAAAATTTAAACATTCCTGTTAAATGACTAAGGTTTGC
                                                                                                                                                                                                                                                                                                                                                                       506 CGGCATCGCATGTTAGAATCTCTAAAATTTAAACATTCCTGTTAAATGACTAGCTTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                 446 TTTTATCAATATGAATTCTGAAGGCCAATATCATACCATTAACTATGAAAGCTTTTAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTAAAAATAGTTTTAGAGGTATTCAAGCAATGCTCTCCTAATATCCATACGCAAGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCACATATTCCAGTAATTTCTGTTATGAGGACTTGAAATAGCAAATTGCCCACAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAACCAGTGGAGTGATTATATTAGC-AAATGTGTTTTGTATCCGGAGTCTTCCTGTCATTG
                                                                                                                                 CTATTATTCCCTTTTAGAACAAGAATAACAATAAGTTTTAATAGTTGCCATACTTAGCA
                                                                                                                                                         CTATTATTCCCTTTTAGAAACAAGAATAACAATAGGTTTTAATAGTTGCCATACTTAGGA
                                                                                                                                                                                                    TITATCAGGICTAATGAAACCAATATTGAATCTCTGATAAATATTTTCTGATACTAG
                                                                                                                                                                                                                                                                         CTATGGGAAATTAGAACTGGCACACCCTGACATTACTAAGTGGAAATGTTAGGATTTTT
                                                                                                                                                                                                                                                                                           CTATGGGAAATTAGAACTGGCACAACCCTGACATTACTAAGTGGAAATGTTAGGATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                TTTTATCAATATGAATTCTGAAGGCCCAATATCATACCATTAACTATGAAAGCTTTTAATT
                                                               GACGCTCAGGTTATGATATGTTTATGAAAATAAGCTTCATTATTTCTTATAGCTACATC
                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fujiyama,A., Hattori,M., Toyoda,A., Taylor,T.D., Yada,T.,
Totoki,Y., Watanabe,H. and Sakaki,Y.
BAC end sequences of Library RPCI-43
Unpublished
                               10;
                               Indels
            Pred. No. 2.1e-114;
); Mismatches 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAATAAAAATTTATTTAAAA 1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAATAAAAATTTATTTAAAAAAAAAA 7
                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AG165287
AG165287.1 GI:16694965
            95.78;
            Best Local Similarity 95.73
Matches 717; Conservative
                                                                                                                                                                                                                                                                                                                                           1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1591
                                                                                                                                                                                                                                                                                                          999
                                                                                                                                                                                                                                                                                                                                                                                                                1171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1231
                                                                                                                                 931
                                                                                                                                                                                                                                                                         1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          35
                                                                                                  745
                                                                                                                                                                    989
                                                                                                                                                                                                        991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AG165287/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                       .8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>а</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                        g
                                                                                                                                                             dd
                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                 ò
                                                                ઠે
```

625 779 567 839 507

Gaps

1019

447 959 1139

88

268

1100

637

969

981 ATACTTAGCATTTATCAGGICTAATGAAACCAATATTGAATCTCTGATAAATATTTTCTG

ATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACATTACTAAGTGGAAATGT TAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTTAAACATTCCTGTTAAATGAC

517

1160

457

1220

```
B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                       8 8
                                                                                                                                                                                                       a
                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                              8 B 8
                                                                                                                                                                                                                                                                                                                                                     중 음
                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                        g
                                                                                    상 점
                                                                                                                               Š
                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: McCray, PB
MCCray Lab
MCCray Lab
University of Iowa Med Labs, Iowa City, IA 52242, USA
2024 University of Iowa Med Labs, Iowa City, IA 52242, USA
Tel: 319 356 4866
Fax: 319 356 4866
Fax: 319 356 471
Email: paul-mccray@uiowa.edu
Tissue Procurement: Dr. M. J. Welsh, University of Iowa
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Researchers may obtain clones from Research
Genetics (www.resgen.com) or from Open Biosystems
(www.openbiosystems.com)
The following repetitive elements were found in this CDNA
sequence: 1-35, AT rich#Low_complexity
Seq primer: M13 FORMARD
POLYA=Yes.
                                                                                                                                     CA312303 696 bp mRNA linear EST 04-NOV-2002 UI-CF-FN0-afm-n-21-0-UI.SI UI-CF-FN0 Homo Sapiens cDNA clone UI-CF-FN0-afm-n-21-0-UI 3', mRNA sequence.
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 696)
Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                              Genome Res. 6 (9), 791-806 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         location/Qualifiers
                                                                                                                                                                            CA312303
CA312303.1 GI:24530401
                                                   AAAAATGAAATCT 1332
                                                                                                                                                                                                                Homo sapiens (human)
                                                                           AAATGGGATTCT 15
                                                                                                                                                                                                                                                                                                    discovery
                                                                                                                                                                                                                                                                                                                           97044477
8889548
                                                   1320
                                                                           27
                                                                                                                RESULT 4
CA312303/c
LOCUS
DEFINITION
                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                              JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                       g
                                                   \delta
                                                                       g
     8
```

1281

1221

GCTTTTAATTCCTAAAATAGTTTTAGAGATATTCAAGCAATGCTCTCCTAATATCCATA 1280

396 GCTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGCTCTCCTAATATCCATA

1161 TAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATATCATACCATTAACTATGAAA

1101

1041

337

1341 ACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGAGGACTTGAAATAGCAAATTG 1400

277 ACT-GETGTTCCACATATTTCAGTAATTTCTGTTATGAGAGGACTTGAAATAGCAAATTG 219

CCCACACACATTAACTGGATAGATCACGTGGTGATCATAAACCACTTGGTACTACACC 1460

1401

218 -CCACACACAGTTAACTGGATAGACCACGTACGTGGTGATCATAACCACTTGGTACTACACC 160

1521 GGCCTAGGGTACCCAAGTGAAGTGAATATATAAGCAAAATGTGTTTGTATCCAGAGTCTT 1580

101 GCC---TAGGTAACCAGTGGAGTGATTATATTAGC-AAATGTGTTTGTATCCAGAGTCTT 46

1461 CAGAAACTCAAAATTGTCTTTTTCTCCTGATGAGATATGGGGTGTCCTTTTGTACGTCTAG 1520

```
623 bp mRNA linear EST 16-NOV-1999
PM3-ST0115-100999-001-C07 ST0115 Homo Bapiens CDNA, mRNA sequence.
AW179297
BM179297.1 GI:6445334
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                          Tel: +55-11-2704922
Fax: +55-11-2707001
Email: asimpson@ludwig.org.br
This sequence fearived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL
                                                                                                                                                                                Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia; Eutheria, Primates; Catarrhini, Hominidae, Homo.

(Dases 1 to 623)

HCGP http://www.ludwig.org.br/ORESTES.

The PAPESP/LICR Human Cancer Genome Project
Unpublished (1999)
                                                                                                                                                                                                                                                                                                              Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                  Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                              Brazil
RESULT 5
AW179297/c
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
SOURCE
ORGANISM
                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
```

TAGCTACATCCTATTATTCCCTTTTAGAAACAAGAATAACAATAAGTTTTAATAGTTGCC 980

ઠે

Gapa

ω ..

DB 14; Length 696;

Query Match
Best Local Similarity 95.6%; Pred. No. 4.7e-107;
Matches 668; Conservative 0; Mismatches 22; Indels

Ŋ

us-10-051-835-15.rst

```
Fax: +55-11-2707001
Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL
This sequence series of the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=PM3&t2=PM3-ST0115-10099-010-B01&t3=1999-09-10&t4=1)
Seq primer: put 18 forward
High quality sequence stop: 615.

Location/Qualifiers
1. .622
/ Organism="Homo sapiens"
//mol_type="mRNA"
//db_cref="mRNA"
//db_cref="mRNA"
//db_cref="mRNA"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//db_cref="mana"
//
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301 AAGTCACTTCAATTAAAGAAACATTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    442 GGCTGCACCTTAAGGAACTTATAATTAATGATGATCTGAATAAACATACCAGGATAAAG 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     382 ATGICAAAGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAA 323
                                                                                                                   Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.

1 (bases 1 to 622)
HCGP http://www.ludwig.org.br/ORESTES.
The FAPESP/INCR Human Cancer Genome Project
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                              01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCTGCACCCTTAAGGAACTTATAATTAATGATCTGAATAAACATAACGATAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      622 ATAAAGCATTANATATATGATATATAGCTATATCTATGTATGTATCTAACAGGAAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGCAGTAGACAGGAGATGGGGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 622;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7 Match 35.2%; Score 569.4; DB 10 Local Similarity 97.4%; Pred. No. 2.2e-105; les 609; Conservative 0; Mismatches 13;
                                                                                                                                                                                                                                                                                                            Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar,
                              GI:6445326
                                                                                                                                                                                                                                                                                                                                                                                                                                                     rel: +55-11-2704922
AW179289
AW179289.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Si
Matches 609;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              262
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음
                                                                                                                                                                /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="homo:806"
/db_xref="homo:806"
/db_xref="homo:806"
/dev_sref="homo:806"
/dov_sref="homo:806"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
ن
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AW179289 622 bp mRNA linear EST 16-NOV-1999
PM3-ST0115-100999-001-B01 ST0115 Homo sapiens cDNA, mRNA sequence.
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=PM3&t2=PM3-ST0115-100999-001-C07&t3=1999-09-10&t4=1)
Seq primer: puc 18 forward
High quality sequence stop: 609.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAAGTCACTTCAATTAAAGAAACATTTTGAGCATGGGACCACCTCAGGTCTTATGCTG 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGATGCAGTAGACAGGAGATGGGGAAATTAGAAAAGAGAACTGTGTGTAATTGAAATGACGT 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATGICAAATGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAA 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATGICAAATGAGTGIGACTCCCTTAAAGTAGAATTAAAGTGICATTCTTTGTTTCCTAA, 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATT 599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGITAGGCGAIGGAITAIAITITICITGGCIIGITGIAIACCCATIGGCCAGGCCITTAI 779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGGACTCCCAAAAGCATTTTGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTCAAA 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATATGATTTTACTGCTTGAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATT 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        144 AGTIAGGCGAIGGAIIAIAITITITIT-GCIIGIIGIAIA-CCAGIIGICAAGGACAIIAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAGTCACTTCAATTAAAGAAACATTTTTGAGCATGGGACCAGGCCTCAGGTCTTATGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGCTGCACCCTTAAGGAACTTATAATTAATGATGATCTGAATAAACATACCAGGATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           35.5%; Score 574.6; DB 10; Length 623; Larity 97.9%; Pred. No. 1.9e-106; Conservative 0; Mismatches 10; Indels 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGAGGCATTTTTAATTGTTACAATCT 865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAGGCATTTTTAATTGTTAAATCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 613; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 6
AW179289/c
LOCUS
DEFINITION
                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원 장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
```

'n

563

540

900

9

263

443

480

420

ö

g

원 ઠે g

à

ò

```
Eukaryota, Metazoa; Chordata, Craniata, Vertebrata; Euteleostomi;
Eukaryota, Metazoa; Chordata, Craniata, Vertebrata; Euteleostomi;
Eu (bases 1 to 717)
Eu (bases 1 to 717)
NIH-MCC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unqublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: ATCC
CDNA Library Preparation: CLOWIECH Laboratories, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LIML)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LiML at: image.llnl.gov
Plate: LLCW845 row: 1 column: 23
High quality sequence stop: 630.
Ince
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BE866341 717 bp mRNA linear EST 27-SEP-2000 601678994F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3961510 5', mRNA sequence.
                                                                                                                                                                                                                                                                         142
                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                  202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                       9
                                                                                                                                        82
                                                                                                                                                                                                                                                                                                                  GAAATTAGAAAAGAGAACTATATAATTGAAAAAGGGATATAAAAGCATTAAAATATATGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATAGCTATATCTATGTATGTATCTAACAGAGAAGTTCAAGTCACTTCAATTAAAGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 TATAGCTATATCTATGTATGTATCTAACAGAGAAGTTCAAGTCACTTCAATTAAAGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301 ATTITICAGCATGGGACCAGCCTCAGGTCTTATGCTGGGATGCAGTAGACAGGAGATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTGGGCTGCACCCTTAAGGAACTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361 GAAATTAGAAAAGAAACTGTGTAATTGAAATGACGTGGGCTGCACCTTAAGGAACTTA
                                                                                                                                        ATAAATATTGCCTAATCCATAGAAAAAGGATATAAAGTATTAAATATGTGATATATAGC
                                                                                                                                                                             1 ATABATATTGCCTAATCCATAGAAAAAAGGATATAAAGTATTAAATTATGTGATATATAGC
                                                                                                                                                                                                                                                                                                                                                                                                                  143 ATCTCTGAGCATAGGAGCAGCCTCAGGTCCTATGGTGGGATGCAGTGGACAGGAGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    323 ATTITIGAGCATGGGACCAGCCTCAGGTCTTATGCTGGGATGCAGTAGACAGGAGATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              443 TAATTAATGATGATCTGAATAAACATACCAGGATAAAGATGTCAAATGAGTGTGTGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      503 TTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAAATATGATTTTACTGCTTGAAAT
                                                                      Gaps
                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S63 TACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTAATATGAATAAT 611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541 TACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTAATATGAATAAT 589
       Length 595,
Query Match
34.8%; Score 564; DB 9; Length 59
Best Local Similarity 95.8%; Pred. No. 2.8e-104;
Matches 564; Conservativė 0; Mismatches 25; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BE866341.1 GI:10315221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BE866341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            383
                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                               23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 8
BE866341
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                臼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                        엄
                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tumor dene index

Unpublished (1997)

Other ESTS: oke2d09.x5

Contact: Nobert Strausberg, Ph.D.

Email: gapbs-remail.nih.gov
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael R.

Emmert-Buck, M.D., Ph.D.

CDNA Library Preparation: M. Bento Soares, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by: Greg Lennon, Ph.D.

CDNA Library Arrayed by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AI791550 S95 bp mRNA linear EST 13-DEC-1999 ok82d09.y5 NCI_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1520465 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /LINES-INDESTINATIONS |
/LIDE | LIDE | NOI GAP Kid3" |
/Clone | LiDE | NOI GAP Kid3" |
/Clone | LiDE | NOI GAP Kid3" |
/Clone | LiDE | LiDE | LiDE | LiDE | LiDE |
/Clone | LiDE | LiDE | LiDE | LiDE | LiDE |
/Clone | LiDE | LiDE | LiDE | LiDE |
/Clone | LiDE | LiDE | LiDE |
/Clone | LiDE | LiDE |
/Clone | LiDE | LiDE |
/Clone | LiDE | LiDE |
/Clone | LiDE | LiDE |
/Clone | LiDE |
/Clone | LiDE | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone | LiDE |
/Clone |
/Clone |
/Clone |
/Clon
                                                                                                                                               780
                                                                                                                                                                                                                                                                                    Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 595)
NCI-CQAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This read is a RESEQUENCE of a previously sequenced human clone original clone citation: see original entry for original citation information
This 5' resequenced clone has no previous 5' data to verify this
                                                                                                                                                                                                              98
                                                                                                                                                                                                                                                                                                                                               56
                                                       143 GTTAGGCGATGGATTATATTTTTTT-GCTTGTATA-CCAGTTGTCAAGAACATTATA
                                                                                                                                                                                                                                                                                                                                 85 AGGACTCCCAAAAGCATTTTGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTCAAAT
              Insert Length: 3866 Std Brror: 0.00 Seq primer: -40RP from Gibco High quality sequence stcp: 459.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .595
/organiam="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:1520465"
                                                                                                                                                                                                                                                                                                                                                                                                                             GAGGCATTTTTAATTGTTACAATCT 865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGGCATTTTTATTGTTAAAATCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AI791550
AI791550.1 GI:5339266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      new read against
                                                                                                                                                   GTTAGGCGATGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25
              561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 7
AI791550
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
```

ORIGIN

```
Homo sapiens (human)
                                                                                                                                   602441635F1 NI)
mRNA sequence.
   1495 TATGGG 1500
                                   TATGGG 717
                                 712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  157
                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                 RESULT 9
BG399616
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
     à
                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                         /tissue_type="carcinoma, cell line"
/tissue_type="carcinoma, cell line"
/lab_host="DH10B (T1 phage-resistant)"
/clone_lib="MINH MGC_53"
/clone_lib="MINH MGC_53"
/note="Organ: bladger; Vector: pDNR-LIB (Clontech);
Site_1: Sfil (ggcgcctcggcc); Site_2: Sfil
(ggcdcttatggcc); Double-stranded cDNA was prepared from cell line RNA. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGCCATATOGCC-3' and 3' adaptor sequence: 5'-CACGCCATATOGCC-3' and 5'-ATTCTAGAGGCCGACAGG-dT (30) BN-3' (where B = A, C, or G and N = A, C, G, or T). Average insert size 1.55
kb (range 0.9-4.0 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATATCATACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCA 1256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAACAATAAGITITIAATAGITIGCCATACITIAGCATTITATCAGGICTAATGAAACCAATAT 1016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGAATCTCTGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAAC 1076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTTAAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCC 1196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCAATGCTCTCCTAATATCCATACGCAA - GTGTGTTTATGACACAAATTCACTAGTCT 1314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGATCATAACCACTTGGTACTACACCCAGAAACTCGAAATTGTCTTTTTCTCCTGATGAGA 1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  592
                                                                                                                                                                                                                                                                                                                                                                                                                         836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 AAATGAGGCATTTTTAATTGTTAAAATCTATTTGGACGCTCAGGTTATGATATGTTTATG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAATAAGCTTCATTATTT-TTATAGCTACATCCTATTATTACCTTTTAGAAACAAGAA 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTGACATTACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAA 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    711
                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180 TAACAATAAGTTT----TAGTTGCCATACTTAGCATTTATCAGGTCTAATGAAACCAATA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 356 AITITAAACAITCCIGITAAAIGACTAAGG-TIGCITTTATCAATAIGAAITCTGAAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     415 AAIATCATACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -GTTTAAAAATGAATTCTTTATA-TGACTGGTTGTTCCACATATTTCAGTAATTTCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       777 TATAAGGACTCCCAAAAGCATTTTGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TATAAGGACTCCCAAAAGCATTTCGAAGGATGGCAATATCAAATAAGTGTATGTCCTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAATGAGGCATTTTTAATTGTTACAATCTATTTGGACGCTCAGGTTATGATATGTTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        897 AAAAATAAGCTTCATTATTCTTATAGCTACATCCTATTATTCCCTTTTAGAAACAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        236 TGAATCTCTGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTGACATTACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCAATGCTCTCTAATATCCATACGCAAAGTGTGGTTTATGACACAAATTCACTAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1315 GGTTTAAAAATGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTT
                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                       11;
                                                                                                                                                                                                                                                                                                                                                      Length 717;
                                                                                                                                                                                                                                                                                                                                                                                      40; Indels
                                                                                                                                                                                                                                                                                                                                                    34.6%; Score 560; DB 10;
93.0%; Pred. No. 1.7e-103;
live 0; Mismatches 40;
organism="Homo sapiens"
                /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:3961510"
                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 93.0
es 675; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1435
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1257
                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                       Best Loca
Matches
                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

```
/mol type="maxna" saptems
/mol type="maxna"
/db xref="taxon:9606"
/clone="inAgge:4557321"
/lab host="DAHOB (TI phage-resistant)"
/clone=lib="NIH MGC 75"
/clone=lib="NIH MGC 75"
/clone=lib="NIH MGC 75"
/clone=lib="NIH MGC 75"
/clone=lib="NIH MGC 75"
/clone=lib="NIH MGC 75"
/clone=lib="NIH MGC 75"
/clone=lib="NIH MGC 75"
/clone=lib="NIH MGC 75"
/clone=lib="NIH MGC 15"
/clone=lib="NIH MGC 15"
/clone=lib="NIH MGC 15"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NIH"
/clone=lib="NI
735 bp mRNA linear EST 12-MAR-2001 NIH_MGC_75 Homo sapiens cDNA clone IMAGE:4557321 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mammalia; Eucheria; Primates; Catarrhin; Hominidae; Homo.

1 (bases 1 to 735)
S NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Conteat: Robert Strausberg, Ph.D.
Email: cgapbe-r@mail.nih.gov
Tissue Procurement: CLONTECH Laboratories, Inc.
CONN Albrary Preparation: CLONTECH Laboratories, Inc.
CDNA Library Arrayed by: The I.M. A.G.E. Consortium (LINL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at:
http://image.llni.gov
Plate: LLCM1261 row: f column: 10
High quality sequence stop: 575.

rce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATTAAATATGTGATATATGTATATCTATCTATCTATGTATAGGGAAGTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTCACTTCAATTGAAGAAACATATCTCTGAGCGATAGGAGCCTCAGGTCCTATGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 GATGCAGTGGACAGGAGAGGGGAAATTAGAAAAGAGAACTATATAATTGAAAAAGGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 TIPATCTACATATCTTATGTATATATATTTGCCTAATCCATAGAAAAAGGATATAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTCACTTCAATTGAAGAAACATATCTCTGAGCATAGGAGCAGCCTCAGGTCCTATGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATGCAGTGGACAGAGAGGGGAAATTAGAAAAGACAACTATATAATTGAAAAAGGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                            Craniata; Vertebrata; Eutele
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 12; Length 735;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12.8%; Score 531.8; DB 12; Length al Similarity 89.9%; Pred. No. 9e-98; Conservative 0; Mismatches 61; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
Eukaryota, Metazoa, Chordata,
                                                                                                                                                                                                                    BG399616.1 GI:13292983
```

120 156 180

9 96

```
96.08;
 Local Similarity 96.0
nes 574; Conservative
                                                                                                                                                                                                                                                                                                             1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1477
                                                                                             1057
                                                                                                                                                                                                                                                                                                                                                                                                                      1417
                                                                                                                                               1117
                                                                                                                                                                                                   1177
                                         997
                                                                 589
                                                                                                                       529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 11
AA205598/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
MEDLINE
PUBMED
COMMENT
  Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  日
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                           ò
                                                          셤
                                                                                             ઠે
                                                                                                                                                à
                                                                                                                                                                       임
                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

I (Dasses 1 to 589)
S (Jan. B., Wu, T., Huang, Q., Huang, C., Kang, B., Gao, X., Xu, Z.,
Xiao, H., Xu, X., Li, N., Peng, Y., Liu, F., Qu, J., Song, H., Cheng, Z.,
Lu, G., Yang, Y., Gu, Y., Chen, Z. and Han, Z.
Lu, G., Yang, Y., Gu, Y., Chen, Z. and Han, Z.
Lungublished (2000)
Contact: Zeguang Han
Chinese National Human Genome Center at Shanghai
201203. P. R. China
Tel: 86-21-50801929 (ex. 45)
Fax: 86-21-50801929 (ex. 45)
Email: hansgochgo.sh.cn
This clone is available at CHGC in Shanghai.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                           EST 16-OCT-2000 mRNA sequence.
                                                                                                                                                  480
                                                                                                                                                                                                     539
                                           360
                                                                   396
                                                                                              420
                                                                                                                        456
                                                                                                                                                                            516
                                                                                                                                                                                                                          AIGHCACAIGAGIGAGIGCTCCCTIAAAGIAGATIAAAGIIGIGGCAITCTIIGITITCCCIA 576
                                                                                                                                                                                                                                                         AATATGA----TITTACTGCTTGAAATT-ACATTTGAGTTG-AAGTTTAGAAACTAACAT 593
                                                                                                                                                                                                                                                                                   577 ACACATATGATTCTTACTGCTTGAAATTCACATTTGAGTTGAAAGTCTAGACACTAACAT 636
                                                                                                                                                                                                                                                                                                              sk(-); Site_1: EcoRI; Site_2:
 337 AAGTCACTTCAATTAAAGAACATTTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGG
                                                                                                              GATGCAGTAGACAGGAGATGGGGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTG
                                                                                                                                                   GGCTGCACCCTTAAGGAACTTATAATTAATGATGATCTGAATAAACATACCAGGATAAAG
                                                                                                                                                                    GGCTGCACCCTTAAGGAACTTATAATTAATGATGTGTCTGAATAAACATACAGGATAAAG
                                                                                              GATGCAGTAGACAGGAGATGGGGAAATTAGAAAAGAGAAACTGTGTAATTGAAATGACGTG
                                                                                                                                                                                                       GTTTCCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /tissue_type="corresponding non cancerous liver /dev_stage="Adult"
/lab_host="SOLR"
/clone_lib="GLC"
/note="Vector: pBluescript sk(-); Site_1: EcoRI; Xho!"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 589;
                                                                                                                                                                                                       ATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTAAAG-TGTGCATTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AV719129 GLC Homo sapiens cDNA clone GLCFLG09 5', AV719129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="GLCFLG09"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 486;
                                                                                                                                                                                                                                                                                                                                                                     653 TATTCCCCCTCTTTAGAAAC 673
                                                                                                                                                                                                                                                                                                                                                                                             697 Triricecercerrinanacae 717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AV719129.1 GI:10816281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                           637
                                                                                                                         397
                                                                                                                                                     421
                                                                                                                                                                                                        481
                                                                                                                                                                                                                                  517
                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                 594
                                            301
                                                                                                 361
                                                                                                                                                                             457
                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 10
AV719129/C
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                       g
                                                                                                                                                                                                                           ል ይ
                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                8
                                                                                          \stackrel{\diamond}{\sigma}
                                                                                                                    원
                                                                                                                                              \delta
                                                                                                                                                                                                     ò
                                                                g
                                           ò
```

```
AA205598 618 bp mRNA linear EST 27-JAN-1997 zq68601.81 Stratagene neuroepithelium (#937231) Homo sapiens CDNA sapiens cona IMAGE:646753 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1357 ATTCCAGTAATTTCTGTTATGAGAGCTTGAAATAGCAAATTGCCCACACAGTTAACTG 1416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rerrrrencerangarangagarancerrrrangagaceragagaracean 1536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATAGATCACGTACGTGGTGATCATAACCACTTGGTACTACACCCAGAAACTCAAAATTG 1476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              289 ACACAAATTCACTAGTCT-GTTTAAAAATGAATTCTTTATATTGACT-GGTGTTCCACAT 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               172 GATAGACCACGTACGTGGTGATCATAACCACTTGGTACTACACCCAGAAACTCAAATTG 113
                                                                                                                                                                                                                                                                                                                                                                                             410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primatee, Catarrhini, Hominidae, Homo.

(bases 1 to 618)

Hillier,L., Lennon,G., Becker,M., Bonaldo,M.F., Chiapelli,B., Chissoe,S., Dietrich,M., DuBuque,T., Favello,A., Gish,W., Hawkins,M., Hultman,M., Kucaba,T., Lacy,M., Le,M., Le,N., Mardis,E., Moore,B., Morris,M., Parsons,J., Prange,C., Rifkin,L., Rohlfing,T., Schellenberg,K., Soares,M.B., Tan,F., Thierry-Meg,J., Trevashis,E., Underwood,K., Wohldmann,P., Waterston,R., Wilson,R., and Marra,M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 112 rc-rircricricarcadarar-degrerccrirreracercraegec---raegraacca 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Generation and analysis of 280,000 human expressed sequence tags Genome Res. 6 (9), 807-828 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  409 CAATAIGAATICIGAAGGCCAATAICCAITAACTITAACTAIGAAGCTITITAATICCIAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         231 ATTTCAGTAATTTCTGTTATGAGAGCTTGAAATAGCAAATTG-CCACACAGTTAACTG
                                                                                            AGGICTAATGAAACCAATATTGAATCTCTGATAAATATTTTCTGATGTTACTAGCTATGG
                                                                                                                                                                                                                                                       GAAATTAGAACTGGGACAACCCCTGACATTACTAAGTGGAAATGTTAGGATTTTTCGGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAATATGAATTCTGAAGGCCAATATCATACCATTAACTATGAAAGCTTTTAATTCCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1237 AATAGITTTAGAGATATTCAAGCAATGCTCTCCTAATATCCATACGCAAGTGTGTTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACACAAATTCACTAGTCTGGTTTAAAAATGAAATCTTTATATTGACTGGGTGTCCCACAT
                                                                                                                               469 cecarerragaarcreraaaarrraaacarrecrerraaareacraaeerraecrrrar
                                                                                                                                                                                                                 GAAATTAGAACTGGCACAACCCTGACATTACTAAGTGGAAATGTTAGGATTTTTCGGCAT
                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Wilson RK
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
                                      ..
6
                                      Indels
Pred. No. 1.8e-88;
                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA205598.1 GI:1803606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
Homo sapiens
```

σ

```
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              580
                      LOCUS
                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
Z98443/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                        /organism="Homo sapiens"
//mol type="mRNA"
//db_xref="GDB:5217005"
//db_xref="taXon:5606"
//clone="IMAGE:646733"
//de_stage="Ntera-2/RA neuroepithelial cells"
//db_bost="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#37231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//clone lib="Stratagene neuroepithelium (#337231)"
//c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1008 AACCAATATTGAATCTCTGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAAC 1067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1128 ATCICTAAAATTTAAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATT 1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGAAGGCCAATATCATACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAG 1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTAGTCTGGTTTAAAATGAAATCTTTATATTGACTGGGGGTGTCCCACATATTCCAGTAAT 1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATGAGATATGGGGTGTCCTTTTGTACGTCTAGGGCTAGGGTACCCAAGTGAAGTGAAT 1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    483 ATCTCTAAAATTTAAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATT 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CIGAAGGCCAATATCATACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAG 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGATATTCAAGCAATGCTCTCCTAATATCCATACGCAAGTGTGTTATGACACAAATTCA 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     245 TTCTGTTATGAGAGGACTTGAAATAGCAAATTG-CCACAGATTAACTGGATATGACAGG·187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13
                    This clone is available royalty-free through LLNL , contact the IMAGE Consortium (info@image.llnl.gov) for further information. Seq primer: -40M13 fwd. from Amersham High quality sequence stop: 345.
Location/Qualifiers
1. .618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       543 TGGCACACCCCTGACATTACTAAGTGAAATGTTAGGATTTTTCGGCATCGCATGTTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGATATTCAAGCAATGCTCTCCTAATATCCATACGCAAGTGTGTTTATGACAAAATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       303 CTAGTCT-GTTTAAAATGAATTCTTTATATTGACT-GGTGTTCCACATATTCAGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACCCATATGGAACCNCGGATAAATATTTTCCGGANGTACTNGCTATGGGAAATTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGCACAACCCTGACATTACTAAGTGGAAATGTTAGGATTTTTTCGGCATCGCATGTTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCTGTTATGAGAGGACTTGAAATAGCAAATTGCCCCACACAGTTAACTGGATAGATCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1428 TACGTGGTGATCATAACCACTTGGTACTACACCCAGAAACTCAAAATTGTCTTTTCTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 477.8; DB 9; Length 618; Pred. No. 8.3e-87; 0; Mismatches 30; Indels 9.
Email: est@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 29.5%;
Best Local Similarity 93.6%;
Matches 573; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAATTTAAAA 1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12
                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

```
298443 EST 22-SEP-1997 MRNA linear EST 22-SEP-1997 HSZ98443 DKFZphthml_lel0 3', HSZ98443 EGT 29443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGC 1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        281 TGAATTCTTTATATTGACT-GGTGTTCCACATATTCAGTAATTTCTGTTATGAGAGGAC 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 164
                                                                                                                                                                                                           Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1145 ATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCCAATATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             460 ATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATGTTCTGAAGGCCAATATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1265 TCTCCTAATATCCATACGCAAGTGTGTTATGACACAAATTCACTAGTCTGGTTTAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     340 TCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCT-GTTTAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1025 TGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              520 TACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTTAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     400 ACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGAAATAGCAAATTG-CCACACAGTTAACTGGATAGACCACGTACGTGATCATAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACTTGGTACTACACCCAGAACTCAAAATTGTC-TTTCTCCTGATGAGATAT-GGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACTAAGTGGAAATGTTAGGATTTTTCGGCATGCTAGGAATCTCTAAAATTTAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACTTGGTACTACACCCAGAAACTCAAAATTGTCTTTTTCTCCTGATGAGATATGGGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        105 ccirrigiacgiciadgec---rageraaccagicgagigariarariage-aaarerer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                        Craniata; Vertebrata; Eutele
Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TIGIALCCAGAGICTICCTGTCATIGTAATAAAAATTTATTAAAAA 1612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 580;
                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; I. (bases I to 580) I. (bases I to 580) I. (bases I to 580) I. (bringbalished (1997) Contact: B. Korn. Institution Molekulare Genomanalyse Deutsches Krebsforschungszentrum Heidelberg Im Neuenheimer Feld 506, D-69120 Heidelberg Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 475; DB 14;
Pred. No. 3.1e-86;
0; Mismatches 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .580
Acrganism="Homo sapiens"
Mol_type="mRNA"
db_xref="taxon:9606"
/clone="DKFZphthm1_le10"
/tissue_type="thymus"
/dev_stage="adult"
/clone_lib="DKFZphthm1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 95.7%;
Matches 563; Conservative
                                                                                                     Z98443.1 GI:2326591
                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  49
```

1567

531

```
Libraryota, Metazoa; Chordata, Craniata, Vertebrata; Euteleostomi,
Enkaryota, Metazoa; Chordata, Craniata, Vertebrata; Euteleostomi,
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1. (Dasses 1 to 739)
Mit-WGC http://mgc.nci.nih.gov/.

Mational Institutes of Health, Mammalian Gene Collection (MGC)

In Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Caboratories, Inc.

CDNA Library Preparation: CLONTECH Caboratories, Inc.

CDNA Library Preparation: CLONTECH Caboratories, Inc.

CDNA Library Preparation: CLONTECH Caboratories, Inc.

CDNA Library Preparation: CLONTECH Caboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CLONTECH Laboratories, Inc.

CDNA Library Preparation: CNA Library Preparation (MGC)

CDNA Library Preparation: C
                                                                                                                                                                                                                                                                          BES64550 739 bp mRNA linear EST 15-AUG-2000 601343885F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3686108 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             428 CCCTTAAGGAACTTATAATTAATGATCTTGAATAAACATACCAGGATAAAGATGTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 TAGACAGGAGATGACGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTGGGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 CCCTTAAGGAACTTATAATTAATGATGATCTGAATAAACATACCAGGATAAAGATGATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        368 TACACAGGAGATGGGGAAATTAGAAAAGAGAACTGTGTAATTGAAAATGACGTGGGCTGCA
                           15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28.7%; Score 464.4; DB 10; Length 739; ilarity 84.5%; Pred. No. 4.2e-84; Conservative 0; Mismatches 96; Indels 15;
                                                                                                    1568 TATCCAGAGICTTCCTGTCATTGTAATAAAAATTTATTAAAAATTTAAAA
                                                                                                                                                                                                                                                                                                                                   mRNA sequence.
BE564550
BE564550.1 GI:9808270
                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  607;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
          1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                          LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                       RESULT 14
BES64550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                   S B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1328 AAICTITATATIGACIGGGGGTGTCCCACATATICCAGTAATTICTGTTATGAGAGGACTIG 1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1448 ITGGTACTACACCCAGAAACTCAAAATTGTCTTTTCTCCTGATGAGATATGGGGTGTCCT 1507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1208 ATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGCTCT 1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1388 AAATAGCAAATTGCCCACACAGTTAACTGGATAGATCACGTAGGTGATCATCATAACCAC 1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1028 TAAATATTITCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACATTAC 1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1088 TAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAAATTTAAACATT 1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATATCATACC 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCTGGTTTAAAAATGA 1327
                                                                                                               AW969587 1inear EST 01-JUN-2000 EST381664 MAGE resequences, MAGK Homo sapiens CDNA, mENA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241 CCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCT-GTTTAAAAATGA 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300 ATTCTTTATATTGACT-GGTGTTCCACATATTTCAGTAATTTCTGTTATGAGGACTTG 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                359 AAATAGCAAATTG-CCACACAGTTAACTGGATAGACCACGTAGGTGGTGATCATAACCAC 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    418 TIGGTACTACACCCAGAAACTCAAAATTGTC-TTTCTCCTGATGAGATAT-GGGTGTCCT 475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cengrinaargaciaaggiingciinnancaarargaariichgaaggeceararcarace 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                     Assessment of gene expression patterns in a model of colon tumor metastasis using a 19,200 element cDNA microarray (unpublished (2000)
Contact: John Quackenbush
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 3528
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                          Craniata, Vertebrata; Buteleostomi;
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 TAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                        (bases 1 to 697)

Hegde, P., Qi, R., Abernathy, K., Dharap, S., Gaspard, R., Gay, C., Polt, I.E., Saeed, A.I., Sharov, V., Lee, N.H., Yeatman, T.J. and Quackenbush, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 697;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone_lib="MAGE resequences, MAGK"
/note="Vector: pBluescriptsKm"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29.3%; Score 474.2; DB 10;
llarity 95.4%; Pred. No. 4.4e-86;
Conservative 0; Mismatches 18;
                                                                                                                                                                                                                                                                          Homo sapiens
Eukaryota; Metazoa; Chordata;
Mammalia; Eutherla; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                              AW969587.1 GI:8159431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: johnq@tigr.org
Plate: 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             primer: Forward.
                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 564; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                     DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                    RESULT 13
AW969587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
```

487

9

120

g

ò

g ઠે

셤 ò

ઠે 셤 $\dot{\delta}$ g & 셤 8 427

547

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Bukaryota; Memalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 626)
S Hegde, P., Qi,R., Abernathy,K., Dharap,S., Gaspard,R., Gay,C., Holt,I.E., Saeed,A.I., Sharov,V., Lee,N.H., Yeatman,T.J. and Quackenbush,J.
Assessment of gene expression patterns in a model of colon tumor metastasis using a 19,200 element cDNA microarray
Unpublished (2000)
Contact: John Quackenbush
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 8328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AW969584 626 bp mRNA linear EST 01-JUN-2000 EST381661 MAGE resequences, MAGK Homo sapiens cDNA, mRNA sequence. AW969584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       958 AACAATAAGTTTTAATAGTTGCCATACCTTAGCATTTATCAGGTCTAATGAAACCAATATT 1017
                                                                                                                                                                                                                                                                                                                                                                                 479 İTİTABATIGGITTABARTCTABITTTGGAÇĞCTCAĞGİTTTATGATATGTTTTTATĞAAACAA 538
                                                                                                                                                                                                                                                                                                                                                                                                                    901 ATAAGCTTCATTATTTCTTATAGCTACATCCTATTATT--CCCTTTTAGAAACAAGAA-T 957
                                                                                                                                                                                                                                                                                                                                                                                                                                           539 TAAGCCTTCATTATTTTTATAGGCTAAATTCTATTATTTCCCCTTTTGGAAACAAGAATT 598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             599 ACCATTAGGTTTTAATAGTGCATAACTTTAGCATTTATCAGGGTCTAAGGAACACAATTT 658
                                                                                                                                    726
                                                                                                                                                                                                                                                                            CCCAAAAGCATTTTGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTCAAATGAGGCA 846
                                                                                                                                                                                                                                                                                                 999
                                                                                                                                                          361 CGATGGATTATATTTTCTTG--CTTGTGTATACCGGTTGTCAGGACATTATAAGGACTC 418
                                                                                                                                                                                                                                                                                                                                                 TITITAATIGITACAA--ICTATITIGGACGCTCAGGTT----AIGATAIGITTAIGAAAA 900
                                 240
                                                                                                  300
                                                                                                                                                                                                         CGATGGATTATATTTTCTTGGCTTGTATACCCATTGGCCAGGGCCTTTATAAGGACT 786
 909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1018 GAATCICI -- GATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCA 1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGAATCTCGGTAAAATTTTCGGGTGGGTACAGACTTGGGAATTAGAAATGGGCA 716
TTTACT-GCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTAATATGA
                                                                                         181 TTACTGGCTTGAAATTACATTTGAGTTGAGTTTTAGAAACTAACATAGGATTAATGA
                                                                   /organism="Homo Bapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone_lib="MAGE resequences, MAGK"
/note="Vector: pBluescriptSKm"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AW969584.1 GI:8159428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: johnq@tigr.org
Plate: 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer: Forward
                                                                                                                                                                                                                                                                                                                                                       847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    629
                                                                     607
                                                                                                                                          299
                                                                                                                                                                                                               727
                                                                                                                                                                                                                                                                                  787
                                                                                                                                                                                                                                                                                                                     419
     548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 15
AW965584
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
SCYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                               g
                                                                                                                                        à
                                                                                                                                                                    a
                                                                                                                                                                                                       ਠੇ
                                                                                                                                                                                                                                                                                ઠે
                                                               8
```

Search completed: April 26, 2004, 01:59:22 Job time : 2943.54 secs

```
1087
                                                                                                                               1147
                                                                                                                                                                                                                                                                                                                                                                                                   1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1567
                                 ;
                                                                                                                                                                                                                                                               1267
                                                                                                                                                                                                                                                                                                                                   CCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCTGGTTTAAAAATGA 1327
                                                                                                                                                                                                 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAATAGCAAATTG-CCACACAGTTAACTGGATAGACCACGTACGTGGTGATCATAACCAC 417
                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      531
                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                      300 ATTCTTTATATTGACT-GGTGTTCCACATATTTCAGTAATTTCTGTTATGAGAGACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGGTACTACACCCAGAAACTCAAAATTGTCTTTTCTCCTGATGAGATATGGGGTGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                   1328 AATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGAGGACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   476 ririgiacgrictadgec---radgraaccadrigadridariatatradc-aaardrifid
                                                                                                                                                                                                                                                                                     181 ATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   418 riegraciacaccagaaacicaaaaridic-rircrccigaigagarar-gagigicci
                                                                                                                                                                                                                                                                                                                                                        241 CCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCT-GTTTAAAAATGA
                                                            1028 TAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACATAC
                                                                                                                                 1088 TAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTTAAACATT
                                                                                                                                                                                                                     121 CCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATATGATACC
                                                                                                                                                                                                                                                                 1208 ATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGCTCT
                                                                                              1 TAAATATTTTTCTGATGTTACTAGGGAAATTAGAACTGGCACAACCCTGACATTAC
                                                                                                                                                   61 TAAGTGGAAATGTTAGGATTTTTTCGGCATCGCATGTTAGAATCTCTAAAATTTAAACATT
                                                                                                                                                                                               1148 CCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATATCATACC
                                 Gaps
                                 6
DB 10; Length 626;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1568 TATCCAGAGTCTTCCTGTCATTGAAAAAATTTAATTAAAAAT 1613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     532 TATCCAAAAGTCTCCTGACATTGTAATAAAATTTTAATTTAAAATT 577
Query Match
28.5%; Score 461.2; DB 10; Length
Best Local Similarity 94.5%; Pred. No. 1.9e-83;
Matches 554; Conservative 0; Mismatches 23; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1508
                                                                                                                                                                                                                                                                                                                                        1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                               상 점
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                   셤
                                                                                                                                       ò
                                                                                                                                                                 d
                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                     원
                                                                       à
```

Appli Appli Appli Appli Appli Appli Appli Appli

Sequence

Sequence 13, 13 Sequence 17, Al Sequence 3, Al Sequence 2, Al Sequence 3, Al Sequence 35, A Sequence 151, Sequence 15, Sequence 210, Sequence 17, Al Sequence

íà.

Title: Perfect score:

Run on:

Scoring table: Seguence:

Searched:

```
Sequence 14, Application US/08232463
Sequence 14, Application US/08232463
Fatent No. 5670367
Fatent No. 5670367
Fatent No. 5670367
FAPPLICANT: PALKER, F.
APPLICANT: PALKER, F. G.
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
NUMBER OF SEQUENCES: 52
CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley & Lardner
STREET: 1800 Diagonal Road, Suite 500
CITY: Alexandria
STRATE: VA
COUNTRY: USA
COUNTRY: USA
APPLICATION TYPE: Flopy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: PETRIN PC-DOS/NS-DOS
SOFTWARE: PETRIN NUMBER: US/08/232,463
FILING DATE:
APPLICATION NUMBER: US/08/232,463
FILING DATE:
APPLICATION NUMBER: US/09/935,313
FILING DATE:
APPLICATION NUMBER: BP 91 114 300.6
FRIUM DATE: 26-AUG-1991
ATTORNEY SEEMY INFORMATION:
NAME: BENT, Stephen A.
RESTERRUE DOCKET NUMBER: 30472/114 IMMU
TELEFRAN: (703) 883-4109
TELEFRAN: (703) 883-4109
TELEFRAN: (703) 883-4109
               PCT-US95-11231-2
US-09-004-056-1
US-09-004-056-1
US-09-539-333D-1
US-09-674-409-1
US-09-434-408-3
US-09-801-861-3
US-08-883-795A-36
US-08-883-795A-36
US-08-883-795A-36
US-08-06-1198-151
US-08-076-118-110
US-08-076-118-110
US-09-64-127-1
US-09-64-127-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 59.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (703) 683-4109
TELEX: 899149
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 7218 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7218 base pairs
nucleic acid
2.5 3881
2.6 2.8 3881
2.4 19124
2.4 319608
2.4 319608
2.4 319608
2.4 319608
2.4 12189
2.4 53332
2.4 5332
2.4 1665
2.3 1685
2.3 1685
2.3 2232
2.3 1685
2.3 1685
2.3 1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; IMMEDIATE SOURCE:
; CLONE: pTZGPt-F18
US-08-232-463-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic STRANDEDNESS:
Query Match
  Sequence 14, Appl
Sequence 1, Appli
Sequence 8976, Ap
Sequence 22, Appl
Sequence 1, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2813, Appl
Sequence 35, Appl
Sequence 60, Appl
Sequence 147, Appl
Sequence 147, Appl
Sequence 3, Appli
                                                                                                                                                          April 25, 2004, 07:15:18 ; Search time 80.3165 Seconds (without alignments) 11186.557 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Appl
Sequence 1, Appl
Sequence 1, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                            US-10-051-835-15
1619
1 ttaatctacatatcttatgt.....atttatttaaaaatttaaaa 1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Issued Patents NA:*

(cgn2_6/ptodata/2/ina/5A_COMB.seq:*

(cgn2_6/ptodata/2/ina/5B_COMB.seq:*

(cgn2_6/ptodata/2/ina/6A_COMB.seq:*

(cgn2_6/ptodata/2/ina/6B_COMB.seq:*

(cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*

(cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
                         GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4 US-02-04-708-22

4 US-08-916-421B-1

US-09-790-988-1

US-09-790-988-1

US-08-920-812-6

US-08-920-812-6

US-08-921-17-6

US-08-921-17-6

US-08-921-17-6

US-09-621-976-2813

US-09-621-976-2813

US-09-621-976-2813

US-09-101-178-36

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35

US-09-919-172-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                   682709 segs, 277475446 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                   nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                           IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
Match Length DB
```

Result

U U

Length 7218;

; OTHER INFORMATION: n equals a, t, c, or g; NAME/KEY: misc_feature	INPORMATION: n equals a, t, c, or EXEY: misc feature ION: (98266)(98266)	KEY: ION: INFO	NAME, KEY: MASC_REALURE LOCATION: (103998) (103998) OTHER INFORMATION: n equals a, t, c, or g NAME, KEY: misc feature CONTENT misc feature	(148948)(148948) RMATION: n equals a, t, c, or misc feature (163385)(163385)(163385)(163385)	<pre>c Information: in equals a, c, c, KEY: misc feature IION: (191989)(191989) s. INFORMATION: n equals a, t, c, formation: n equals a, t, c,</pre>	misc_reacure (19199s)(1919 ORMATION: n equa misc_feature		U	, LOCATION: (234814)(234814) , OTHER INFORMATION: n equals a, t, c, or g : NAME/KEY: misc feature				; NAME/KEY: misc feature ; LOCATION: (312993). (312993) : OTHER INFORMATION: n equals a, t, c, or g	re_ (319226) (319226)	INFORMATION: in equals a, c, c, c, c, c, c, misc feature ON: (559167) (559167)	equals a, t, c, c, cr. ce ce (559241) equals a, t, c, or	92) 18 a, t, c, or		; NAME/KEY: misc reature ; LOCATION: (657081)(657081) ; OTHER INFORMATION: n equals a, t, c, or g	(6572 ORMATI	(6744 (6744
Best Local Similarity 2.6%; Pred. No. 5.5e-05; Matches 10: Conservative 214: Mismatches 155; Indels 0; Gaps 0;	ATATAAATATTGCCTAATCCATAGAAAAAAGGATATAAAGTATTAAATATGTGAT 	81 GCMNNINNINNINNINNINNINNINNINNINNINNATAGGGAAGTTCAAGTCACTTCAATTGAAGAAAC 140 	141 ATATCTCTGAGCATCAGCCCTCAGGTCCTATGGTGGGATGCAGTGGACAGGAGG 200 : :::::::::::::::::::::::::::::::::	201 GGGAAATTAGAAAAGAGAACTATATAATTGAAAAAGGGATATAAAGGCATTAAATTATGA 260 :::::: ::::::::::::::::::::::::::::::	261 TATATAGCTATATCTATGTATGTATCTAACAGAGAAGTTCAAGTCACTTCAATTAAAGAA 320 	321 ACATTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGGGATGCAGTAGACAGGAGATG 380 : : ::: ::: ::: :: :: :: :: :: :: :: ::	381 GGGAAATTAGAAAAAGAGAA 399 :::::: ::::::::::::::::::::::::::::	RESULT 2 US-08-916-421B-1/c : Semence 1, Application US/08916421B		me Sequence of the Methanogenic Archaeon,	TITLE OF INVENTION: jarnaschii FILE REFERENCE: PB275 C CURRENT APPLICATION NUMBER: US/08/916,4215	CURRENT FILING DATE: 1997-08-22 PRIOR APPLICATION NUMBER: US 60/024,428 PRIOR FILING DATE: 1996-08-22	NUMBER OF SEQ ID NOS: 3 SOFTWARE: Patentin version 3.1	LENGTH: 1664976 TYPE: DNA	OKGANISM: Methanococcus jannaschii FERTURE: NAME/KEY: misc_feature	LOCATION: (28222)(28222) OTHER INFORMATION: n equals a, t, c, or g NAME/KEY: misc feature	LOCATION: (2825/)(28258) OTHER INFORMATION: n equals a, t, c, or g NAME/KEY: misc_feature IOCATION: (84773)(18473)	a, t, c, or	a, t, c, or	a, c, or	OTHER INFORMATION: n equals a, t, c, or g NAME/KEY: misc feature.

```
317387 ATAAATTTTATTTCATCAATTCCAATATTTAGATTTTCTCTTATGGTTTTTGCTATTCTT 317328
                                     898 AAAATAAGCTTCATTATTTCTTATAGCTACATCCTATTATTCCCTTTTAGAAACAAGAAT
                                                                          AACAATAAGTTTTAATAGTTGCCATACTTAGCATTTATCAGGTCTAATGAAACCAATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Match 2.9%; Score 46.4; DB 4; Length 399; Local Similarity 10.1%; Pred. No. 0.037; es 37; Conservative 182; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Jobert, S.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENSET. 054PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 8976
                                                                                                                                                                                                                                                                                       Sequence 8976, Application US/09621976; Patent No. 6639063; Patent No. 6639063; GENERAL INFORMATION: APPLICANT: Dumas Milne Edwards, J.B.
                                                                                                                                                                                              317327 CCTŤCŤCCAÁACÁŤÁ 317312
                                                                                                                                                       1018 GAATCTCTGATAATA 1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
CORGANISM: Homo sapiens
US-09-621-976-8976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  824 TGTATG 829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       357 TGGCTG 362
                                                                                                                                                                                                                                                        RESULT 3
US-09-621-976-8976
                                                                                958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                              à
                                                                                                               g
                                                                                                                                                       δ
                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc_feature
; LOCATION: (1664854)..(1664855)
OTHER INFORMATION: n equals a, t, c, or g
US-08-916-4218-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     b
                                                                                                                                                                                                                                                                                                                                       מ
                                                                                                                                                                                                                                                                                                                                                                                                 מ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       b
                                               þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ដូ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                             9
                                                                                                       Ö
                                                                                                                                                               or
                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                               or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ΰ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ບັ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ϋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ů
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ΰ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ΰ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         οÌ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAWE/KEY: misc_feature
LOCATION: (1602912) . (1602912)
OTHER INFORMATION: n equals a, t, c,
NAME/KEY: misc_feature
LOCATION: (1603734) . (1603734)
OTHER INFORMATION: n equals a, t, c,
LOCATION: (1637998) . (1637998)
OTHER INFORMATION: n equals a, t, c,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ú
                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc feature
LOCATION: (871619) (871619)
CHER INFORMATION: nequals a, t,
NAME/KEY: misc feature
LOCATION: (1064830) (1064830)
CHER INFORMATION: nequals a, t,
NAME/KEY: misc feature
LOCATION: (1056846) (1056846)
CHER INFORMATION: nequals a, t,
NAME/KEY: misc feature
LOCATION: (1056846) (1056846)
CHER INFORMATION: nequals a, t,
NAME/KEY: misc feature
LOCATION: (1119881) (1119881)
CHER INFORMATION: nequals a, t,
NAME/KEY: misc feature
LOCATION: (1130881) (1130881)
CHER INFORMATION: nequals a, t,
NAME/KEY: misc feature
LOCATION: (1310988) (1310988)
CTHER INFORMATION: nequals a, t,
NAME/KEY: misc feature
LOCATION: (1313224) (1313234)
CTHER INFORMATION: nequals a, t,
NAME/KEY: misc feature
LOCATION: (1313224) (1313234)
CHER INFORMATION: nequals a, t,
NAME/KEY: misc feature
LOCATION: (1313224) (1313234)
CHER INFORMATION: nequals a, t,
NAME/KEY: misc feature
LOCATION: (1313224) (1313234)
  NAME/KEY: misc_feature
LOCATION: (682442). (682442)
OTHER INFORMATION: n equals a, t,
NAME/KEY: misc feature
LOCATION: (71352). (71352)
OTHER INFORMATION: n equals a, t,
NAME/KEY: misc feature
LOCATION: (74164). (74164)
NAME/KEY: misc feature
LOCATION: (779455). (779455)
OTHER INFORMATION: n equals a, t,
NAME/KEY: misc feature
LOCATION: (779576). (779676)
OTHER INFORMATION: n equals a, t,
NAME/KEY: misc feature
LOCATION: (779676). (779676)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: (1349491)...(1349491)
OTHER INFORMATION: n equals a,
NAME/KEY: misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION: (1470091).

OTHER INFORMATION: n equals a,

NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                         NAME/KEY: misc_feature
LOCATION: (855539)..(855539)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OCCATION: (1389-73)..(1349473)
OTHER INFORMATION: n equals a,
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: (1569020)..(1569020)
OTHER INFORMATION: n equals a,
```

```
61 KKSXSHWRSHGMMTXRNKGRGAASWAGYNSHMTYMTRRHRYYRYRKKACTKWRAAGMWGK 120
                                                                                                                                                                                                                                                                                                                                                                    177 ASCYRGAYMASAGMYYWMWYYWMRRKWMYSAGWSWWRKWTRRCASYSCWWGAXWM 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              337 MYWKISRWSSWRSKRCKYKYRRSCCCWSMSCYWKIYYRSWYCASCYYSYKIKRASCCMMC 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             297 CCMKWRKMAMAMYMMGMTYCKKTSAMRYYRSCYSAKWRRWRRWMCAYWMKTCSWWMMCWT 356
464 AACATACCAGGATAAAGATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGC 523
                                                                                                               524 ATTCTTTGTTTCCTAAATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAG 583
                                                                                                                                                                                                                           584 AAACTAACATAGCATTAATATGAATAATGCATGGAAAATTATTATCCTTTGAAAACTGAT 643
                                                                                                                                                                                                                                                           644 TGATAAATATATCCCCCCTCCTTTAGAAACAGTCAAAAGCCACTTCAAACAAGTTTCAAA 703
                                                                                                                                                                                                                                                                                                                                                                                                                                                764 TGGCCAGGCCTTTATAAGGACTCCCAAAAGCATTTTGAAGAATGGCAATATCAAATAAG 823
                                   Sequence 22, Application US/10204708; Patent No. 6677731; GENERAL INFORMATION: APPLICANT: OLEK, Alexander; APPLICANT: PIEPENBROCK, Christian;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 4
US-10-204-708-22
```

2.9%; Score 47.2; DB 4; Length 1664976; larity 52.6%; Pred. No. 0.3; Conservative 0; Mismatches 93; Indels 0;

Similarity

Best Local Sim: Matches 103; Query Match Best Local S

셤 ઠ

```
Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         מ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   מ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       מ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            bì
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                             or
                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            占
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                        or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ϋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ϋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ΰ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ΰ
            ORGANISM: Methanococcus jannaschii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ú
                            FEATURE:

NAME/KEY: misc_feature

LOCATION: (2822). (28222)

OTHER INFORMATION: n equals a, t,

NAME/KEY: misc_feature

LOCATION: (28257). (28258)

OTHER INFORMATION: n equals a, t,

NAME/KEY: misc_feature

LOCATION: (844773). (84773)

OTHER INFORMATION: n equals a, t,

NAME/KEY: misc_feature

LOCATION: (84808). (84808)

OTHER INFORMATION: n equals a, t,

NAME/KEY: misc_feature

LOCATION: (84812). (84812)

OTHER INFORMATION: n equals a, t,

NAME/KEY: misc_feature

LOCATION: (88159). (98129)

OTHER INFORMATION: n equals a, t,

NAME/KEY: misc_feature

LOCATION: (88159). (98129)

OTHER INFORMATION: n equals a, t,

NAME/KEY: misc_feature

LOCATION: (98256). (98266)

LOCATION: (98266). (98266)

UCATION: (98266). (98266)

UCATION: (98266). (98343)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: (98343)...(98343)
OTHER INFORMATION: n equals a, t, MAME/KEY: misc_feature
LOCATION: (10398)...(10398)
OTHER INFORMATION: n equals a, t, MAME/KEY: misc_feature
LOCATION: (148948)...(148948)
OTHER INFORMATION: n equals a, t, OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc feature
COCATION: (191995)..(191995)
THER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc feature
LOCATION: (234814)..(234814)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: misc feature
LOCATION: (309398)..(309398)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: (309418)..(309418)
OTHER INFORMATION: n equals a,
NAME/KEY: misc. feature
LOCATION: (312837)..(312837)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AME/KEY: misc feature
OCATION: (234187) ..(234187)
YTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc feature
LOCATION: (234220)...(234220)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WAME/KEY: misc_feature_
LOCATION: (163385)...(163385)
THER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: misc feature
LOCATION: (191989) .(191989)
OTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc_feature
LOCATION: (231980)...(231980)
UTHER INFORMATION: n equals a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (319226)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application US/08916421B
Patent No. 6503729
GENERAL INFORMATION:
TITLE OF INVENTION: Complete Genome Sequence of the Methanogenic Archaeon, Methanococy
Patent No. 6503729
TITLE OF INVENTION: jannaschii
FILE REFERENCE: PB275
CURRENT APPLICATION NUMBER: US 60/024,428
PRIOR APPLICATION NUMBER: US 60/024,428
PRIOR APPLICATION NUMBER: US 60/024,428
NUMBER OF SEQ ID NOS: 3
SOFTWARE: Patentin version 3.1
### APPLICANT: BERLIN, Kurt

TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA Replication

TITLE OF INVENTION: Dy Assessing DNA Methylation

FILE REPERENCE: 5013.1012

CURRENT APPLICATION NUMBER: US/10/204,708

CURRENT APPLICATION NUMBER: PCT/EP01/03971

PRIOR FILING DATE: 2001-04-06

PRIOR APPLICATION NUMBER: DE 10019058.8

PRIOR FILING DATE: 2000-04-06

PRIOR FILING DATE: 2000-04-06

PRIOR FILING DATE: 2000-04-06

PRIOR FILING DATE: 2000-04-07

PRIOR FILING DATE: 2000-04-07

PRIOR FILING DATE: 2000-04-07

PRIOR FILING DATE: 2000-04-07

PRIOR FILING DATE: 2000-06-30

PRIOR FILING DATE: 2000-06-30

**STOR APPLICATION NUMBER: DE 10043826.1

**PRIOR FILING DATE: 2000-09-01

NUMBER OF SEQ ID NOS: 98

**LENGTH: 11049

**TENGTH: 11049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TIGCCATACTTAGCATTTATCAGGTCTAATGAACCAATATTGAATCTCTGATAAATATT 1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAAACCCTGACATTACTAAGTGGA 1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              433 TGAGAGTTATTTATAGAATGTTTGTTTATAATAATGAAATATAAAAATTATAAAATTTAAAAAG 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     856 GTTACAATCTATTTGGACGCTCAGGTTATGATATGTTTATGAAAAATAAGCTTCATTATT 915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTTATAGCTACATCCTATTATTCCCTTTTAGAAACAAGAATAACAATAAGTTTTAATAG 975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               riciagiriariariariariariasararigaririagaariariagaariarida 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          493 ritritradiaggirritriaaaaaaritaarraiaggicggcgcgcgcgrurararritgr 552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         796 ATTITIGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTCAAATGAGGCATTTTAATT 855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       314 AGTATAAATTTTTTAGAGGATAATTTGATAAT-TTATAGTGAAAAAATTTTTTAAATT 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Artificial Sequence
FRATURE:
OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-204-708-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match

2.8%; Score 45.4; DB 4; Length 11049;
Best Local Similarity 48.3%; Pred. No. 0.18;
Matches 156; Conservative 0; Mismatches 166; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1096 AATGTTAGGATTTTTCGGCATCG 1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     553 AATTTTAGTATTTTGGGAGGTCG 575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 1
LENGTH: 1664976
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-916-421B-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  916
```

g ò g ð g ò 셤 8

ð

g

ð

S

or ö ö or or ö 占 ö ö ö ö ö or 占 NAME/KEY: misc_feature LOCATION: (871619)...(871619) OTHER INPORMATION: n equals a, t, NAME/KEY: misc_feature LOCATION: (1084830)...(1084830) OTHER INFORMATION: n equals a, t, OTHER INFORMATION: n equals a, t, NAME/KEY: misc_feature LOCATION: (1119881). (1119881) OTHER INFORMATION: n equals a, t, NAME/KEY: misc_feature LOCATION: (1130881). (1130881) OTHER INFORMATION: n equals a, t, OTHER INFORMATION: n equals a, t, NAME/KEY: misc_feature LOCATION: (68242)..(68242) OTHER INFORMATION: n equals a, t NAME/KEY: misc_feature LOCATION: (713652)..(713652) OTHER INFORMATION: n equals a, t E/KEY: misc feature
ATION: (657203)..(657203)
ER INFORMATION: n equals a, t
Misc feature
ATION: (674435)..(674435)
ER INFORMATION: n equals a, t NAME/KALI MAES-LEGALLI LOCATION: (559241). OTHER INFORMATION: n equals a, NAME/KEY: misc feature LOCATION: (600992).(600992) OTHER INFORMATION: n equals a, AME/KEY: misc feature OCATION: (741684)..(741684) THER INFORMATION: n equals a, AME/KEY: misc feature OCATION: (855539)..(855539) THER INFORMATION: n equals a, NAME/KEY: misc feature LOCATION: (156⁹020)..(1569020) JTHER INFORMATION: n equals a, INFORMATION: n equals a, AME/KEY: misc feature OCATION: (657081)..(657081) YTHER INFORMATION: n equals a, KEY: misc feature TON: (1310988)..(1310988) INFORMATION: n equals a, JOCATION: (1313224)..(1313224) THER INFORMATION: n equals a, JOCATION: (1349491) ... (1349491) THER INFORMATION: n equals a, NAME/KEY: misc_feature CCATION: (559167)..(559167) NAME/KEY: misc feature LOCATION: (622708) ..(622708) OTHER INFORMATION: n equals a, ION: (779455)..(779455) INFORMATION: n equals a, INFORMATION: n equals a, ION: (1349473)...(1349473) INFORMATION: n equals a, MAME/KEY: misc feature LOCATION: (1096846)..(1096846) /KEY: misc_feature FION: (779676)..(779676) AME/KEY: misc feature OCATION: (779455)..(77 NAME/KEY: misc_feature NAME/KEY: misc feature NAME/KEY: misc_feature

485113 AATCCCTAAATTCATTAAAGCTCTTTTAAAATAGATTCAAAAGGTACTTCCTCAAAATTA 485172 580478 GTATATGTTAAAAATTACTTAATACAAATAAAATTAAAATTTATCTTTTATCAAAGATAG 580537 641 GATTGATAAATATTCCCCCTCCTTTAGAAACAGTCAAAAGCCACTTCAAAACAAGTTTC 700 564 ACATTIGAGITGAAGITIAGAAACTAACATAGCATTAATATATGAATAATGGAAAATT 623 484993 ACACATTTTCAGCATÓGTCCGTAATÀTTTGAAACATATTTATCCAATATCACGTCATCTC TAGAAACTAACATAGCATTAATATGAATAATGCATGGAAAATTATTATCCTTTGAAAACT 485053 TATAAGCTAACAACACTTCTCAGCAACAAACCCTAATTTAAAATTTAAAATACTCATAT 461 ATAAACATACCAGGATAAAGATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTAAAGTG 521 TGCATTCTTTGTTTCCTAAAATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTT 504 TAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAAATAGATTTACTGCTTGAAATT 580418 TAAAAAAATCTAGAATTTGATTTTTTTTATTAAAAATATGAAATTTTTACTTAACATT 0; Gaps Gaps GENERAL INFORMATION:
APPLICANT: SHIGENOBU, SHUJI
APPLICANT: WATANABE, HIDENI
APPLICANT: WATANABE, HIDENI
APPLICANT: WATANABE, HIDENI
APPLICANT: WATANABE, HIDENI
APPLICANT: BAKAKI, YOSHIYUKI
TITLE OF INVENTION: GENOME DNA OF BACTERIAL SYMBIONT OF APHIDS
FILE REFERENCE: 081356/0159
CURRENT FILING DATE: 2001-02-23
FRIOR APPLICATION NUMBER: JP2000-107160
FRIOR FILING DATE: 2000-04-07
NUMBER OF SEQ ID NOS: 7
SEQ ID NO 1
LENGTH: 640681 DB 4; Length 1664976; ; 485173 caarracaacgrcararrergggarrrrarcrrirararrire 485215 Score 44.4; DB 4; Length 64
Pred. No. 1.1;
0; Mismatches 171; Indels Query Match 2.8%; Score 44.6; DB 4; Length 10 Best Local Similarity 47.3%; Pred. No. 1.3; Matches 134; Conservative 0; Mismatches 149; Indels 701 AAAATAAAGGAAGGTAGCAAGTTAGGCGATGGATTATATTTTC 743 NAME/KEY: misc feature
LOCATION: (L605912). (1605912)
NAME/KEY: misc feature
LOCATION: (L603734)
LOCATION: (L603734)
LOCATION: L6537990. (1637990). (1637990). (1637990). (1637990). (1637990). (1637990). (1637990). (1637990). (1637990). (1637990). (163790). (1637990). (164790). (164855) Sequence 1, Application US/09790988 Patent No. 6632935 2.7%; Query Match Best Local Similarity 46.2¹ Matches 147; Conservative ; TYPE: DNA ; ORGANISM: Buchnera sp. US-09-790-988-1 RESULT 6 US-09-790-988-1 581 d ద g ଚ ò ઠે

```
RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                      855 Tiaaaaaradaaaaracadaaradrigaaaaggridraaaragrirahaaaagggi 2796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1095 Trangagaringagagocarngaraharahanagaragiaaracarahaharahahagoc 3036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2975 caccaricócaécaakcerecaaritaaaatraaaaricaritreacerecerecerecae 2916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2915 AATAATCGCAATCCCAAAGAAATGGGTTTCGAGACCAATGACACAAATTCTAATATAAAA 2856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3155 ACATTTAAATTTTCCATTAGAAACTCCAGTTTTAAAAAAATCACAATAGATTTAATCT 3096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1035 TGTAGTGAATTATTAAAATATGAAAATAGCCCACGGTACGTTTAAAAAACATTGTGTC 2976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          624 ATTATCCTTTGAAAACTGATTGATAAATATATTCCCCCTCCTTTAGAAACAGTCAAAAGC 683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         684 CACTICAAACITICAAAATAAAGGAAGGTAGCAAGTTAGGCGAIGGAITATATITIC 743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          744 TTGGCTTGTTGTATACC -- CATTGGCCAGGGCCTTTATAAGGACTCCCAAAAGCATTTTG 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         802 AAGAATGGCAATATCAAATAAGTGTATGTCCTCTCAAATGAGGCATTTTTAATTGTTACA 861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        624 ATTATCCTTTGAAAACTGATTGATAAATATTCCCCCTCCTTTAGAAACAGTCAAAAGC 683
                                                                              684 CACTICAAACAAGTITCAAAATAAAGGAAGGTAGCAAGTTAGGCGAIGGAITAIAITITC 743
                                                                                                                                                           TIGGCTIGITGIATACCCATIGGCCAGGGCCTTTATAAGGACTCCCAAAAGCATTTIGAA 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           564 ACATTIGAGTIGAAGTITAGAAACTAACATAGCATTAATATATAATAGCATGGAAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 640681;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: WATANAE, HIDEMI
APPLICANT: WATANAE, HIDEMI
APPLICANT: HATTORI, MASAHIRA
APPLICANT: SAKAKI, YOSHIYUKI
TITLE OP INVENTION: GENOME DNA OF BACTERIAL SYMBIONT OF APHIDS
FILE REFERENCE: 081356/0159
CURRENT APPLICATION NUMBER: US/09/790,988
CURRENT FILING DATE: 2001-02-23
PRIOR APPLICATION NUMBER: UP2000-107160
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PATENTIN Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                acatarccrrraarrrraacagraraaaaraaaarrraaaaaaa 2752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCTACATCCTATTATTCCCTTTTAGAAACAAGAATAACAATAA 965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches 216; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.7%; Score 44.4; DE 46.0%; Pred. No. 1.1;
                                                                                                                                                                                                                                                                                      580718 TCATTGATATATAAATA 580735
                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/09790988 Patent No. 6532935 GENERAL INFORMATION: APPLICANT: SHIGENOBU, SHUJI
                                                                                                                                                                                                                                                 804 GAATGGCAATATCAAATA 821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2.7%
Best Local Similarity 46.0%
Matches 186; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: DNA
; ORGANISM: Buchnera sp.
US-09-790-988-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 1
LENGTH: 640681
                                                                                                                                                                                                                                                                                                                                                                         -09-790-988-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2795
                                                                                                                                                                    744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \delta
                                                                              ð
                                                                                                               셤
                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                 à
                                         g
```

```
2309 irianarraagananarraganakaartarrarrarrarrarakararakarraka 2250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2189 TAATTITTATTITAGTTATAATTAATAATATAGCATTAAATATATATTTAATTTA 2130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            560 AATTACATTTGAGTTTGAAGTTTAGAAACTAACATAGCATTAATATGAATAATGCATGGAA 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2249 TAATTCAAGTATAAACTTTAAAAGATAATTTGTTTTATAAACACTTATTGTTTACTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            440 TIATAATTAATGATGATCTGAATAAACATACCAGGATAAAGATGTCAAATGAGTGTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 500 CCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAAATATGATTTTACTGCTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 8654;
                                                                        APPLICANT: Ohno, Tsuneya
APPLICANT: Watsuhisa, Akio
APPLICANT: Wehara, Hiotsugu
APPLICANT: Bed, Soji
TITLE OF INVENTION: Probe for Diagnosing Infectious Disease
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSES: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches 109; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2129 AATTAATACTATATTATGACGGACACTTTCGTATTTTC 2092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  620 AATTATTATCCTTTGAAAACTGATTGATAAATATTC 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/920,812 FILING DATE: 29-AUG-1997 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 43.6; DB 1;
Pred. No. 0.44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Staphylococcus epidermidis
STRAIN: Clinical Isolate SE-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19036/32420
                                                                                                                                                                                                                                                                                                                                STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRICK APPLICATION DATA:
APPLICATION NUMBER: US 08/362,577
FILING DATE: 27-WAR-1995
ATTONEY/AGENT INFORMATION:
NAME: Rin-Laures, Li-Heien
REGISTRATION NUMBER: 33,547
                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
Sequence 6, Application US/08920812
Patent No. 5763188
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 19
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 2.7%;
Best Local Similarity 50.0%;
Matches 109; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: Genomic DNA ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8654 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleic acid
EDNESS: double
                                                                                                                                                                                                                                                                                                             Chicago
```

```
Probe for Diagnosing Infectious Disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2129 AATTAATACTATATTATGACGCACACTTTCGTATTTTC 2092
                                                                                                                                                                                                  3: Marshall, O'Toole, Gerstein, Murray & 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 620 AATTAITAICCITIGAAAACIGAIIGAIAAAIAIATIC 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Rin-Laures, Li-Hsien
REGISTRATION NUMBER: 33,547
REFERENCE/DOCKET NUMBER: 19036/32420
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Staphylococcus epidermidis
STRAIN: Clinical Isolate SE-22
                    APPLICANT: Ohno, Tsuneya
APPLICANT: Ohno, Tsuneya
APPLICANT: Ohno, Tsuneya
APPLICANT: Websias, Akio
APPLICANT: Uchara, Hioteugu
APPLICANT: Uchara, Hioteugu
APPLICANT: Uchara, Hioteugu
APPLICANT: Uchara, Noji
TITLE OF INVENTION: Probe for Diagnosi
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerste
STREET: 6100 Sears Tower, 233 South
CITY: Chicago
STREET: 111inois
COUNTRY: United States of America
ZIP: 6066-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: BAP PC Compatible
OPERATING SYSTEM: PC COMPATIBLE
OPERATING SYSTEM: PC COMPATIBLE
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/921,177
FILING DATE: 29-AUG-1997
CLASSIFICATION NUMBER: US 08/362,577
FILING DATE: 27-MAR-1995
ATTORNEY AMERICANION NUMBER: US 08/362,577
FILING DATE: 27-MAR-1995
ATTORNEY AMERICANION NUMBER: US 08/362,577
FILING DATE: 27-MAR-1995
ATTORNEY AMERICANION NUMBER: US 08/362,577
FILING DATE: 27-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 8654 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: Genomic DNA
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
E: Genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       : 312/474-6300
312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN:
US-08-921-177-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2309 TTAAATTAAGGAAAATTAGAAACAATCTTATTTTTTGAATATAGCAATGCTACATTGC 2250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2249 TAATTCAAGTATAAACTTTAAAAGATAATTTGTTTTATAAACACTTATTGTTTACTTCT 2190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2189 TAATTTTATTTAGTTATAATTAACTAAATATAGCATTAAATATATTTCTTTAAATTTA 2130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  500 CCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAAATATGATTTTACTGCTTGA 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  440 ITATAATTAATGATGATCTGAATAAACATACCAGGATAAAGATGTCAAATGAGTGTGACT 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  560 AATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTAATAATAATGCATGGAA 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
                                              GENERAL INFORMATION:
APPLICANT: Ohno, Tsuneya
APPLICANT: Matsuhisa, Akio
APPLICANT: Uchara, Hirotsugu
APPLICANT: Eda, Soji Hirotsugu
APPLICANT: Eda, Soji Probe for Diagnosing Infectious Disease
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSER: Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1; Length 8654;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 43.6; DB 1; Length 86: Pred. No. 0.44; 0; Mismatches 109; Indels
                                                                                                                                                                                                                                                   E: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                              COUNTRY: United States of America

COUNTRY: United States of America

Ill: 60606-6402

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC COMPATIBLE
COMPUTER: PER PC-DOS/MS-DOS
SOFTWARE: PATENTIN BATA:
APPLICATION NUMBER: US/08/920,827
FILING DATE: 29-AUG-1997
CLASSIFICATION DATA:
APPLICATION NUMBER: US 08/362,577
FILING DATE: 27-MAR-1995
ATTONEY/AGRIT INFORMATION:
REGISTRATION NUMBER: 33,547
REFERENCE/POCKET NUMBER: 33,547
REFERENCE/POCKET NUMBER: 19036/32420
TELEFHONE: 312/474-6300
TELEFPA: 312/474-6448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2129 AATTAATACTATATTATGAGGGACACTTTCGTATTTTC 2092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               620 AATTATTATCCTTTGAAAACTGATTGATAAATATATTC 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         , טאנים Staphylococcus epidermidis
;
US-08-920-827-6
Sequence 6, Application US/08920827
Patent No. 5770375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 312/
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 8654 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match
Best Local Similarity 50.0%;
Matches 109; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
MOLECULE TYPE: Genomic DNA
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                          STREET: 6300 :
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
```

```
2309 TTAAATTAAGGAAAATTAGAAACAATCTTATTTTTTTTTAATTAGCAAATGCTACATTGC 2250
                                                                                                                                                                                                                                                                                                                                              2249 TAATTCAAGTATAAACTTTAAAAGATAATTTGTTTTATAAACACTTATTTGTTTACTTCT 2190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     440 TTATAATTAATGATGATGTGAATAAACATACCAGGATAAAGATGTGAATGAGTGTGACT 499
                                                                                                                                                                                                                                                                             500 CCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAAATATGATTTTACTGCTTGA
                                                                                                                                                                                                                                                                                                                                                                                                 560 AATTACATTTGAGTTGAAGTTTAGAAACTAACATAGGATTAATATGAATAATGCATGGAA
                                                                        ô
       Length 8654;
Query Match 2.7%; Score 43.6; DB 1; Length 86 Best Local Similarity 50.0%; Pred. No. 0.44; Matches 109; Conservative 0; Mismatches 109; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 6, Application US/08362577C; Patent No. 5807673; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 11
US-08-362-577C-6/c
```

US-08-921-177-6/c ; Sequence 6, Application US/08921177

RESULT 10

```
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
US-08-920-828-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2309 TTAAATTAAGGAAAATTAGAACAATCTTATTTTTTGAATATAGCAAATGCTACATTGC 2250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2249 TAATTCAAGTATAAACTTTAAAAGATAATTIGTTTATAAACACTTATTGTTTACTTCT 2190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2189 TAATTTTATTTAGTTATAATTAACTAAATATATAGCATTAAATATATGTTGTTTAAATTATA 2130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          500 CCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAAATATGATTTTACTGCTTGA 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S60 AATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTAATATGAATAATGCATGGAA 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 440 TTATAATTAATGATGATGTGAATAAACATACCAGGATAAAGATGTCAAATGAGTGTGACT 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
2.7%; Score 43.6; DB 1; Length 8654;
Best Local Similarity 50.0%; Pred. No. 0.44;
Matches 109; Conservative 0; Mismatches 109; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 6, Application US/08920828

Patent No. 585398
GENERAL INFORMATION
GENERAL INFORMATION:
APPLICANT: Ohno, Tsuneya
APPLICANT: Uchara, Hirotsugu
APPLICANT: Edara, Hirotsugu
APPLICANT: Edara, Soji
TITLE OF INVENTION: Probe for Diagnosing Infectious Disease
                                                                                        Probe for Diagnosing Infectious Disease
                                                                                                                                                       3: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2129 AATTAATACTATATTATGAGGAGACACTTTGGTATTTTC 2092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        620 AATTATTATCCTTTGAAACTGATTGATAAATATATTC 657
                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC comparible
COMPUTER: PPC COMPACIBLE
SOFTWARE: PATENTIN Release #1.0, Version #1.25
ARREWT APPLICATION DATA:
US/08/362,577C
                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 27-70...
FILING DATE: 27-70...
FILING DATE: 27-70...
FILING DATE: 27-70...
FILING DATE: 27-70...
NAME: Rin-Laures, Li-Haien
REGISTRATION NUMBER: 33-547
REFERENCE/DOCKET NUMBER: 19036/32420
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEPHONE: 312/474-6448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CANAMISM: Staphylococcus epidermidis ; STRAIN: Clinical Isolate SE-22 US-08-362-5777-6
                                                                                                                                                                                                                                                                                                                                                                                                27-WAR-1995
                                                                                                                                                                                                     CITY: Chicago
STATE: Ullinois
COUNTX: United States of America
ZIP: 6060-6402
APPLICANT: Ohno, Tsuneya
APPLICANT: Mascunisa, Akio
APPLICANT: Uchara, Hirotsugu
APPLICANT: Eda, Soji
TITLE OF INVARTION: Probe for INVABR OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 8654 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genomic DNA
                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: G
ORIGINAL SOURCE:
ORGANISM: Stap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . US-08-920-828-6/c
                                                                                                                                                       ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

```
2249 TAATTCAAGTATAAAACTTTAAAAGATAATTTGTTTTATAAACACTTATTGTTTACTTCT 2190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2309 iraaatraaggaaaarraagaaacaarcrrarrrrrrigaararaggaaargcracarrgc 2250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              440 TTATAATTAATGATGATGATGAATAAACATACCAGGATAAAGATGTCAAATGAGTGTGACT 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          500 CCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAAATATGATTTTACTGCTTGA 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S60 AATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTAATATGAATAATGCATGGAA 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
2.7%; Score 43.6; DB 2; Length 8654;
Best Local Similarity 50.0%; Pred. No. 0.44;
Matches 109; Conservative 0; Mismatches 109; Indels 0;
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk.
WEDIUM TYPE: IMP FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAtentin Release #1.0, Version #1.25
GURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/920,826
FILING DATE: 29-AGG-1997
CLASSIPICATION DATA:
APPLICATION NUMBER: US 08/362,577
FILING DATE: 37-MAR-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2129 AATTAATACTATATTATGACGGACACTTTCGTATTTTC 2092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               620 AATTAITAICCITIGAAAACTGAITGAIAAATAITATTC 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Jubert, S.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REFERENCE: GENEET.054PR2
CURRENT FILING DATE: 2000-07-21,976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 33,547
REFERENCE/DOCKET NUMBER: 19036/32420
TELECOMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Staphylococcus epidermídis
STRAIN: Clinical Isolate SE-22
                                                                                                                    STREET: 6300 Sears Tower, 233 Sout
CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIF: 6060-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-621-976-2813
Sequence 2813, Application US/09621976
Patent No. 6639063
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELERAY: 312/7.
TELERAY: 25-3856
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 8654 base pairs
TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "TYPE: "T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Rin-Laures, Li-Hsien
REGISTRATION NUMBER: 33,547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
MOLECULE TYPE: Genomic DNA
ORIGINAL SOURCE:
```

```
qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                 g
                                                                                                                                                                   q
                                                                                         ઠે
                                                                                                                                              ò
                                                                                                                                                                                                     8
                                                                                                                                                                                                     551 ACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTAATATGAATAA 610
                                                                                                                                                                                                                                                          CWKKKAYYRKTTCYSSKGWTWWKRWKKAWTTWWWKKTYYWAATRYWWMCWTKRWRASWW 182
                                                                                                                                                                                                                                                                                                                                                                     GGATTATATITITCTTGGCTTGTTGTATACCCATTGGCCAGGGCCTTTATAAGGACTCCCA 790
                                                                                                                                                                                                                                                                                                                                                                                       AAAGCATTTTGAAGAATG-GCAATATCAAATAAGTGTATGTCCTCTCAAATGAGGCATTT. 849
                                                                                                                                                                                                                                                                                                                                                                                                                                            KKYMMKRWWKUMARMYRYSTGTRASKWWRRWYYTWMKKWKYAWARAAWRRWAMWAWRR 362
                                                                                                                                                                                                                                 62
                                                                                                                                                                                                                        3 WYWWKYTTWYAKCWTKWKWSNSYWMYWKWYYMKTYWRWRRKKKKKAWKYWKTWTWWYWRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 3, Application US/09202893B

Patent No. 6315692

GENERAL INFORMATION:

APPLICANT: KADOTA, Mariko

APPLICANT: KADOTA, Mariko

APPLICANT: SHARKI, Mayumi

APPLICANT: SHRASAWA, Yukiko

APPLICANT: SHRASAWA, Yukiko

APPLICANT: SHRASAWA, Yukiko

APPLICANT: SAKO, Tomoyuki

TITLE OF INVENTION: METHODS FOR TRANSFERRING GENE INTO CHROMOSOME

FILE REFERENCE: 980794/HG

CURRENT APPLICATION NUMBER: US/09/202,893B

CURRENT APPLICATION NUMBER: US/09/202,893B

CURRENT APPLICATION NUMBER: US/09/20265

PRIOR FILING DATE: 1997-06-25

PRIOR FILING DATE: 1996-09-06

PRIOR FILING DATE: 1996-09-06

PRIOR FILING DATE: 1996-09-06

NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                             ;
                                                                                                                                                   Length 832
                                                                                                                                                Query Match
2.7%; Score 43.2; DB 4; Length 8:
Best Local Similarity 11.0%; Pred. No. 0.27;
Matches 41; Conservative 176; Mismatches 154; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Lactobacillus case
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTATTTCTTAT 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      363 ACAAAATATAAT 374
NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent.pm
SEQ ID NO 2813
                                                       TYPE: DNA
ORGANISM: Homo sapiens
                                                                                            ; NAME/KEY: CDS
; LOCATION: 235..399
US-09-621-976-2813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 14
US-09-202-893B-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-202-893B-3
                                                                                                                                                                                                                                                                                                                                                                                                                               191
                                                                                                                                                                                                                                                                                          63
                                                                                                                                                                                                                                                                                                                                               123
                                                                                                                                                                                                                                                                                                                                                                          731
                                                                                                                                                                                                                                                                                                                                                                                                                                                         243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          910
                                                                                                                                                                                                                                                                             ୍ବୁ
                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                              8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

Length 1542;

DB 4;

Score 43.2;

2.78;

Query Match

```
1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  109 TICGGCATCGCATGT---TAGAATCTCTAAAATTTAAACATTCCTGTTAAATGACTAAGG 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           989 CATTTATCAGGICTAAIGAAACCAATATIGAAICTCIGATAAAIATITTCIGAIGTIACI 1048
                                                                                                                  .sos dicaatanateeatanaeectieatiticeeatefeertiateceeceereaatateee 1449
                                                                                                                                                                                                                     1448 cererrirmakirchanacakchanakanaccheracharakenakanakanakana 1389
                                                                                                                                                                                                                                                                                                                       1388 gagccricaaaariggracaraaaargrrrrrgaccrirrrrggcrarrcagrcaaaagrcagr 1329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        929 TCCTATTATTCCCTTTTAGAAACAAGAATAACAATAAGTTTTAATAGTTGCCATACTTAG 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                224 RMMSKTCWSGSRGGYMTSYTSTRSYSMYMASHMYTHWWRRWWGRWWSTYWYMAWGKKWWRYA 165
                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1226 TAATTCCTAAAATAGTTTTAGAGATATTCAAGCAATGCTCTCCTAATATCCATACGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    404 теставлетасвать тетассать в тататать тетте тучничите теттич
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            344 RMWMMKKKARRRYYWWKSTYACASRYRKYTWGWWWYMKRMMSTRWYCYMCWKCCMYRGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1049 AGCTATGGGAAATTAGAACTGGCACAAACCCTGACATTACTAAGTGGAAATGTTAGGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              284 RCAWYIWARGRAWGSVAWGKWKSMRSAMSMCTRWYYKKGSTYWIWKCTCALWCYWYWKYWK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITGCTITIATCAATATGAATTCTGAAGGCCAATATCATACCATTAACTATGAAAGCTTT
                                                                                                                                                                   568 ITGAGTTGAAGTTTAGAAACTAACATAGCATTAATATGAATAATGCATGGAAAATTATTA
                                                                    508 GIAGATTAAAGTGTGCATTCTTTGTTTCCTAAAATATGATTTTACTGCTTGAAATTACAT
                                                                                                                                                                                                                                                                           628 TCCTTTGAAAACTGATAAATATATTCCCCCTCCTTTAGAAACAGTCAAAAGCCACT
                        Gaps
                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2.6%; Score 42.8; DB 4; Length 8 ilarity 14.2%; Pred: No. 0.33; Conservative 170; Mismatches 172; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2813, Application US/09621976
; Sequence 2813, Application US/09621976
; Patent No. 6639063
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Jobert, S.
; APPLICANT: Jobert, S.
; TITLE OF INVENTION: ESTS and Encoded Human Proteins.
; TITLE OF INVENTION: ESTS and Encoded Human Proteins.
; TITLE OF INVENTION: ESTS and Encoded Human Proteins.
; TITLE OF INVENTION: 19315
; TITLE OF INVENTION DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 19335
; SEQ ID NOS: 19333
; SEQ ID NO SEQ 12
; LENETH: 932
Pred. No. 0.32;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                 1328 CACGAACATTTACAACACAA 1309
                                                                                                                                                                                                                                                                                                                                                                                688 TCAAACAAGTTTCAAAATAA 707
  51.0%;
     Best Local Similarity 51.0
Matches 102; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
57; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         , NAME/KEY: CDS
, LOCATION: 235.399
US-09-621-976-2813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 15
US-09-621-976-2813/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9911
```

. **q**0

44 MXYYWYWEAMKREWMWRKWESWSWMWMAWGMTRWAARMWWRW 3

Search completed: April 26, 2004, 02:11:08 Job time : 88.3165 secs

À.

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.	U
OM nucleic - nucleic search, using sw model	υυ
Run on: April 24, 2004, 23:47:42; Search time 430.176 Seconds (without alignments) 15988.422 Million cell updates/sec	U
Title: Perfect score: 1619 Sequence: 1 ttaatctacatatcttatgtatttatttaaaaaatttaaaa 1619	
Scoring table: IDENTITY NUC Gapop 10.0, Gapoxt 1.0	
Searched: 3373863 segs, 2124099041 residues	
Total number of hits satisfying chosen parameters: 6747726	
Minimum DB seq length: 0 Maximum DB seq length: 200000000	
Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries	28 X
Database : N Geneseq 29Jan04:* 1:	8
the second of the second secon	· **

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	Human	Abx74725 Human cDN	-	σ	Abl67046 Thyroid c	Abl64323 Stomach c		0	Abz10246 Haematopo	Abk28407 DNA trans	Abq67093 Human ang	_	Aal15210 Human bre	Abz10246 Haematopo	Abl32891 Human imm		Aac50419 Arabidops	Continuation (4 of	Human	Rice g	12	Abl54336 Chemicall	Ablaall Human imm
SUMMARIES	Ω		ABX74725	ABL68031	ABL67459	ABL67046	ABL64323	ABL33246	AB210100	ABZ10246	ABK28407	ABQ67093	ABL56203	AAL15210	ABZ10246	ABL32891	ABZ10100	AAC50419	AAV21209 03	ABL34609	ADA71938	ABL32315	ABL54336	ABL33111
	DB	8	7	φ	9	ω	ø	9	7	7	9	9	9	4	7	ø	7	'n	N	9	7	φ	φ	9
	% Query Match Length DB	1619	618	580	580	580	580	6077	8056	8056	9504	83391	32392	883	8056	6131	8056	1455	110000	18585	2000	6641	6641	10957
	% Query Match	98.5	29.5	29.3	29.3	29.3	29.3	3.2	3.2	3.2		3.1	3.1	3.0	3.0	0. M	3.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9
	Score	1595	477.8	475	475	475	475	52.6	51.8	51.2	50.6	50.4	49.8	48.8	48.8	48.6	48	47.2	47.2	47	46.8	46.8	46.8	46.8
	ult No.		7	m	4	Ŋ	9	7	œ	σ	10	11	12	13	14	15	16	17	18	13	20	21	22	23
	Result No.	! !	υ	υ	υ	U	υ				U	υ	O		υ	υ	υ		υ	υ				

98.5%; Score 1595; DB 8; Length 1619;

Query Match

Sequence 1619 BP; 560 A; 240 C; 287 G; 508 T; 0 U; 24 Other;

9923	ın	65	64	95	Abl32466 Human imm	Abq66971 Human ang		m	Abl33824 Human imm	Aak86270 Human imm	Abk39965 Human che	Aag05264 Sequence	Abl32669 Human imm	Abl92219 Chemicall	322	Abl34026 Human imm	Adb54330 Pretreate	Abl33242 Human imm	Abl34558 Human met	Aaa70114 Plasmodiu	Abl32254 Human imm
ABK39923	ABK28258	AAS46594	ABK39964	ABL33951	ABL32466	AB066971	ABL33931	ABL92293	ABL33824	AAK86270	ABK39965	AAQ05264	ABL32669	ABL92219	ABL49322	ABL34026	ADB54330	ABL33242	ABL34558	AAA70114	ABL32254
w	Ψ	4	w	w	9	9	ø	ω	v	4	ø	N	v	v	φ	ø	ó	φ	ø	m	v
6247	8170	13469	15479	5771	15373	5499	7456	7456	8771	9026	15479	0	11049	40	40	17594	11787	15825	15825	6888	18154
																					2 .
46.6	46.6	9		ý	Ġ	45.6	'n	'n	, in	ທ		ın.	Ľ	L.	'n	'n	'n	ď	S	4	45
4	52	56	27	28	0 0			32		34	55	36	7		6		4.4	2	4 1	4	45
N	٠,																				

ALIGNMENTS

Gene therapy, emphysema; ss; gene; chronic obstructive pulmonary disease; respiratory disorder; lung cancer; asthma; human. The invention relates to a combination comprising cDNAs or their complements that are differentially expressed in respiratory disorder. The combination is useful for preparing a composition for disponsing or treating respiratory disorders e.g. lung cancer, chronic obstructive pulmonary disease, emphysema or asthma. The present sequence represents human cDNA differentially expressed during lung cancer New combination comprising cDNAs that are differentially expressed in respiratory disorders, useful for diagnosing or treating respiratory disorders e.g., lung cancer, chronic obstructive pulmonary disease, emphysema or asthma. Human cDNA differentially expressed in lung cancer #457. ACH04252 standard; cDNA; 1619 BP. Claim 1; Page; 39pp; English. 04-APR-2002; 2002US-00116802. 04-APR-2001; 2001US-0281593P. 26-SEP-2003 (first entry) WPI; 2003-540803/51. (LASE/) LASEK A W. US2003065157-A1. Homo sapiens. 03-APR-2003. Lasek AW; ACH04252;

~ •

```
TCTCTGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Takashi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1725/c
ABX74725 standard; cDNA; 618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-MAR-2002; 2002WO-US009576.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2001US-0279411P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Teh BT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (VAND-) VAN ANDEL INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-040679/03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rhodes D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200279411-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-OCT-2002
                                                                                                                            1141
                                                                                                                                                                                                                                                                                                     1321
                                                                                                                                                                                                                                                                                                                                                             1381
                                                                                                                                                                                                                                                                                                                                                                                           1441
                                                                                                                                                                                                                                                                                                                                                                                                                       1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1501
                                       1081
                                                                   1081
                                                                                               1141
                                                                                                                                                        1201
                                                                                                                                                                                   1201
                                                                                                                                                                                                                 1261
                                                                                                                                                                                                                                             1261
                                                                                                                                                                                                                                                                       1321
                                                                                                                                                                                                                                                                                                                                  1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1561
          1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABX74725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Haab B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 2
ABX74725/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               THE REST BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY SEX BY S
                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                     रुं है रुं
                                                                                                                      셤
                                                                                                                                                        ઠે
                                                                                                                                                                              쉽
                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                         ठ
                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATAAGTTTTAATAGTTGCCATACTTAGCATTTATCAGGTCTAATGAAACCAATATTGAA 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                          ö
                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                         120
                                                                                                                                                                      180
                                                                                                                                                                                                   180
                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                      9
                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATAAGTTTTAATAGTTGCCATACTTAGCATTTATCAGGTCTAATGAAACCAATATTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTCTGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGGACAACCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATAAGCTTCATTATTATTAGCTACATCCTATTATTCCCTTTTTAGAAACAAGAATAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTAGGCGATGGATTATATTTTCTTGGCTTGTTATACCCATTGGCCAGGGCCTTTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTTAGGCGATGGATTATATTTTTCTTGGCTTGTTGTATACCCATTGGCCAGGGCCTTTATA
                                                                                                              GTCACTICAATTGAAGAAACATATCTCTGAGCATAGGAGCAGCCTCAGGTCCTATGGTGG
                                                                                                                                                                                                                                                AGTCACTTCAATTAAAGAAACATTTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                          GATGCAGTAGACAGGAGATGGGGAAATTAGAAAAGAGAGAACTGTGTAATTGAAATGACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                           GATGCAGTAGACAGGAGATGGGGAAATTAGAAAAGGAGAACTGTGTAATTGAAATGACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCTGCACCCTTAAGGAACTTATAATTAATGATGATCTGAATAAACATACCCAGGATAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGECAAATGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGTGCATTCTTGTTTCCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAACTAACATAACATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGACTCCCAAAAGCATTTTGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGGCATTTTTAATTGTTACAATCTATTTGGACGCTCAGGTTATGATATGTTTATGAAAA
                                                                          TTAATCTACATATCTTTATGTATATAAATATTGCCTAATCCATAGAAAAAGGATATAAAG
                                                                                                                                                                                                                               GATGCAGTGGACAGGAGAGAAATTAGAAAAGAGAACTATATAATTGAAAAAGGGAT
                                                                                                                                                                                                                                                                                                                AAGTCACTTCAATTAAAGAAACATTTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u> anangaanaanggaaaannannanggaaaaciganganaanannannccc</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTAATCTACATATCTTATGTATATAATATTGCCTAATCCATAGAAAAAAGGATATAAAG
                                                                                                                                                                        GTCACTTCAATTGAAGAAACATATCTCTGAGCATAGGAGCAGCCTCAGGTCCTATGGTGG
                          Gaps
                          ..
                          Indels
                          ;
0
            red. No. 0;
Mismatches
            Pred.
100.08;
            Best Local Similarity 100.
Matches 1619; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1021
                                                                                                              61
                                                                                                                                            61
                                                                                                                                                                                                    121
                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              196
                                                                                                                                                                      121
                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ୪ ନ ୪
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8 6 8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원 수 명
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                8 8
                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 8
                                                                         g
                                                                                                                                    8 8 8
                                                                                                                                                                                                                          8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                        ò
                                                                                                             8
```

1440 1500 1440 1140 1200 1200 1320 1320 1380 1380 1500 1560 GIGITIGIALCCAGAGICITCCIGICAITGIAAIAAAAATITAAITAAAAATITIAAAA 1619 New microarray, comprising a matrix of cDNA probe from a set of probes immobilized to a solid surface in predetermined order, useful in the prognosis of patients with clear cell renal carcinoma. AAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATA <u> AAAATGAAATCTTATTATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGA</u> TAACCACTTGGTACTACACCCAGAAACTCAAAATTGTCTTTTCTCCTGATGAGATATGGG GTGTCCTTTTGTACGTCTAGGGCCTAGGGTACCCAAGTGAAGTGAATATATAAAAAAT ACATTACTAAGTGGAAATGTTAGGATTTTTTCGGCATCGCATGTTAGAATCTCTAAAATTT AAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATA TCATACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCA AAAATGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGA ACATTACTAAGTGGAAATGTTAGGATTTTTCGGCATGCTAGAATCTCTAAAATTT ATGCTCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCTGGTTTA Human; microarray; solid surface; immobilised probe; CC-RCC; differential expression profile; aggressive CC-RCC tumour type non-aggressive CC-RCC tumour type; clear cell renal carcinoma; gene expression profiling; tumour tissue; gene; ss. Human cDNA sequence #135 down-regulated in CC-RCC patients.

Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid; stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous; cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;

gene; ds.

Ovary cancer related gene sequence SEQ ID NO:6368.

(first entry)

15-MAY-2002

```
GATGAGATATGGGGGTGTCCTTTTGTACGTCTAGGGCTACCCAAGTGAAGTGAAT 1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1068 TGGCACAACCCTGACATTACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGA 1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1128 ATCTCTAAAATTTAAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATT 1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1008 AACCAATATTGAATCTCTGATAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAAC 1067
                                                         The present invention relates to a microarray comprising a matrix of at least one cDNA probe from a set of probes immobilised to a solid surface in a predetermined order, where a row of pixels corresponds to replicates of one distinct probe from the set. The probes are complementary to muchael acid sequences that are expressed differentially in aggressive as compared to non-aggressive types of clear cell renal carcinoma (CC-RCC) and that hybridise to the probes under high stringency conditions. The microarray is useful for the propososis of patients with CC-RCC, wherein aggressive and non-aggressive CC-RCC tumour types are characterised by differential expression profiles of genes that hybridise with one or more probes immobilised on the microarray. The arrays are useful for gene expression profiling of tumour and normal tissues. The present sequence represents a human cDNA sequence down-regulated in CC-RCC patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      483 ATCTCTAAAAATTTAAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1188 CTGAAGGCCAATATCATACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1248 AGATATTCAAGCAATGCTCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        303 CTAGTCT-GTTTAAAAATGAATTCTTTATTTGACT-GGTGTTCCACATATTTCAGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           245 TICTGTIAIGAGAGGACTIGAAATAGCAAATIG-CCACACAGTIAACTGGATATGACACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TACGTGGTGATCATAACCACTTGGTACTACACCCAGAAACTCAAAATTGTCTTTTCTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    127 GAIGAGATAT-GGGTGTCCTTTTGTACGTCTAGGCC---TAGGTAACCAGGGAGTGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                543 rescacecereacarracraagresaarerrassarrirressearecearerrasa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   423 CTGAAGGCCAATATCATAACTATAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              363 AGATATTCAAGCAATGCTCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTAGTCTGGTTTAAAAATGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1368 ITCTGTTATGAGAGGACTTGAAATAGCAAATTGCCCACACAGTTAACTGGATAGATCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 29.5%; Score 477.8; DB 7; Length 618; Best Local Similarity 93.6%; Pred. No. 1.2e-95; Matches 573; Conservative 0; Mismatches 30; Indels 9;
                                                                                                                                                                                                                                                                                                                                                                                           Sequence 618 BP; 203 A; 106 C; 106 G; 197 T; 0 U; 6 Other;
                   Example 3; SEQ ID NO 295; 179pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAATTTAAAA 1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QQ .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
```

1247

364

424

544

Gaps ; 484

1307

304

1367

246

```
Screening for anti-neoplastic agent involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature gene set.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Endress G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ebner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 6368; 44pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Carter KC,
                                                                                                                                                                                                                                                                                                                                     2000US-0236842P.
2000US-0237172P.
2000US-0237172P.
2000US-0237278P.
2000US-0237294P.
                                                                                                                                                                                                                                                                                                2000US-0236032P.
2000US-0236033P.
2000US-0236034P.
                                                                                                                                                                                                                                                     2000US-0235638P.
2000US-0235711P.
2000US-0235720P.
                                                                                                                                                                                                                                                                           2000US-0235840P
2000US-0235863P
2000US-0236028P
                                                                                                                                                                                                                                                                                                                        2000US-0236109P
                                                                                                                    30-MAY-2001; 2001WO-US010838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Augustus M,
Weaver Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           (AVAL-) AVALON PHARM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-188264/24.
                                                                                      WO200194629-A2
                                                                                                                                                                                    22-88P-2000;
25-88P-2000;
25-88P-2000;
25-88P-2000;
25-88P-2000;
25-88P-2000;
26-88P-2000;
26-88P-2000;
27-88P-2000;
27-88P-2000;
27-88P-2000;
27-88P-2000;
27-88P-2000;
28-88P-2000;
28-88P-2000;
28-88P-2000;
28-88P-2000;
28-88P-2000;
28-88P-2000;
28-88P-2000;
                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Young PE,
Soppet DR,
```

1487

187

128

1607

13

ABL68031 standard; DNA; 580 BP.

RESULT 3
ABL68031/c
ID ABL68
XX
AC ABL68

ABL68031;

72

1427

Human, cancer, colon, breast, ovary, oesophagus, kidney, thyroid, stomach, lung, prostate; pancreas, carcinoma, antitumour, cancerous, cytostatic, gene therapy, antineoplastic, Wilm's tumour, adenocarcinoma; gene, ds.

30-MAY-2001; 2001WO-US010838

WO200194629-A2

13-DEC-2001

Homo sapiens

Thyroid cancer related gene sequence SEQ ID NO:5796

```
The present invention describes a method (M1) for screening for an antineoplastic agent. The method involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, determining a change in comprises a sequence (S) selected from 847 sequences (given in ABL61664 to ABL70110), or is at least 95% identical to (S), where a change in expression is indicative of anti-neoplastic activity. (I) has cytostatic activity and can be used in gene therapy. M1 can be used for screening an anti-neoplastic agent, and can be used for producing a product which is the data is sufficient to convey the chemical structure and/or properties of the agent. M1 can be used in the treatment of cancer such as colon, breast, stomach, lung, thyrold, oseophageal, ovarian, kidney, prostate or pancreatic cancer, and cancer, infiltrating ductal cancer, infiltrating ductal cancer, infiltrating lobular cancer, squamcus continum, neuroendocrine carcinoma, papillary carcinoma and Wilm's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTTTTGTACGTCTAGGGCCTAGGGTACCCAAGTGAAGTGAATATATAAGCAAAATGTGT 1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGAGGAC 1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATATCAT 1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCATTAACTATGAAAGCTTTTAATTCCTAAAATAGTTTTAGAGATATTCAAGCAATGC 1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTCCTAATATCCATACGCAAGTGTGTTTTATGACACAAATTCACTAGTCTGGTTTAAAAA 1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CACTTGGTACTACACCCAGAAACTCAAAATTGTCTTTTTCTCCTGATGAGATATGGGGTGT 1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          222 TIGAAATAGCAAATIG-CCACACAGTIAACIGGATAGACCACGTACGIGGIGGICATAAA 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             400 ACCATTAACTATGAAAGCTTTTAATTCCTAAAATAGTTTTAGAGATATTCAAGCAATGC 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      340 TCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCT-GTTTAAAAA 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGAAATAGCAAAATTGCCCACACACAGTTAACTGGATAGATCACGTAGGTGATCATAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTITIGIACGICIAGGCC---IAGGIAACCAGIGAGIGATIAIATIAGC-AAAIGIGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TACTAAGTGGAAATGTTAGGATTTTTTCGGCATGCTTAGAATCTCTAAAATTTAAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAAACCTGACAT
                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                   ٠<u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TIGIATCCAGAGICTTCCTGTCATTGTAAAAAATTTAATTAAAAA 1612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N
                                                                                                                                                                                                                                                                                                                                                                DB 6; Length 580;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rrgrarccagagrerrecrererraraaaaaarrrarraaaaa
                                                                                                                                                                                                                                                                                                                                                                                                 16; Indels
                                                                                                                                                                                                                                                                                                                              Sequence 580 BP; 198 A; 98 C; 96 G; 187 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                            Query Match
29.3%; Score 475; DB 6;
Best Local Similarity 95.7%; Pred. No. 5e-95;
Matches 563; Conservative 0; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1265
                                                                                                                                                                                                                                                                                                                                                                                                                                         1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                           à
```

```
Screening for anti-neoplastic agent involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature gene set.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        for an anti-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Horrigan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes a method (MI) for screening
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Endress G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ebner R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 5796; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Carter KC,
                                                                                                                                                                                                                                                                                                                                                                                       2000US-0236034P.
2000US-0236109P.
2000US-0236111P.
2000US-0236842P.
2000US-0236891P.
                                                                                                                                                                                  18-SEP-2000; 2000US-0234009P.
20-SEP-2000; 2000US-0234034P.
20-SEP-2000; 2000US-0234034P.
22-SEP-2000; 2000US-02345609P.
22-SEP-2000; 2000US-02345609P.
                                                                                                                                                                                                                                                                                                  2000US-0235637P
2000US-0235638B.
2000US-0235711P.
2000US-0235720P.
2000US-0235840P.
2000US-0235863P.
                                                                                                                                                                                                                               22-SEP-2000; 2000US-0234567P.
25-SEP-2000; 2000US-0234923P.
25-SEP-2000; 2000US-0234934P.
25-SEP-2000; 2000US-023502P.
25-SEP-2000; 2000US-023503P.
                                                                                                                                                                                                                                                                              25-SEP-2000; 2000US-0235134P.
26-SEP-2000; 2000US-0235280P.
26-SEP-2000; 2000US-0235380P.
26-SEP-2000; 2000US-023538P.
27-SEP-2000; 2000US-023511P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0237173P.
2000US-0237278P.
2000US-0237294P.
                                                                                                                                                                                                                                                                                                                                                            2000US-0236038P.
2000US-0236032P.
2000US-0236033P.
                                                                                                                                                                                                                                                                                                                                                                                                                                        2000US-0237172P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Augustus M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Weaver Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (AVAL-) AVALON PHARM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-188264/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-OCT-2000; 2
02-OCT-2000; 2
02-OCT-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                         28-SEP-2000;
28-SEP-2000;
28-SEP-2000;
28-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Young PE,
Soppet DR,
```

ABL67459 standard; DNA; 580

ABL67459/c

(first entry)

15-MAY-2002

ABL67459;

```
to be tested for anti-meorbastic activity, determining a change in comprises a sequence (s) selected from 8447 sequences (given in ABL61664 to ABL70110), or is at least 95% identical to (s), where a change in expression is indicative of anti-neoplastic activity. (I) has cytostatic activity and can be used in gene therapy. MI can be used for screening an anti-neoplastic agent, and can be used for producing a product which is the data collected with respect to the anti-neoplastic agent as a result of MI, and the data is sufficient to convey the chemical structure and/or properties of the agent. MI can be used in the treatment of cancer such as colon, breast, stomach, lung, thyroid, oesophageal, ovarian, kidney, prostate or pancreatic cancer, adenocarinoma, calcinoma, clear cell cancer, infiltrating ductal cancer, infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine carcinoma, papillary carcinoma and Wilm's
neoplastic agent. The method involves exposing cells to a chemical agent
                                                                                                                                                                                                                                                                                                                                                                                                                                                       tumour
```

Sequence 580 BP; 198 A; 98 C; 96 G; 187 T; 0 U; 1 Other;

```
1204
                                7:
                                                            TGATAAATHTTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACAT 1084
                                                                                                                       TACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTTAAAAC 1144
                                                                                                                                                                                                                                            ACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGC 1264
                                                                                                                                                                                                                                                                                                       TOTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCTGGTTTAAAAA 1324
                                                                                                                                                                                                                                                                                                                                                                  TGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGAGGAC 1384
                                                                                                                                                                                                                                                                                                                                                                                                                              CACTIGGTACTACACCCAGAAACTCAAAATTGTCTTTTTCTCCTGATGAGATATGGGGTGT 1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTTTTGTACGTCTAGGGCCTAGGGTACCCAAGTGAAGTGAATATATAAGCAAAATGTGT 1564
                                                                                           521
                                                                                                                                                                                                               401
                                                                                                                                                                                                                                                                           341
                                                                                                                                                                                                                                                                                                                                   rcrccrantarccaracecaagrererrareacacaaarrcacragrer-griraaaa 282
                                                                                                                                                                                                                                                                                                                                                                                                 223
                                                                                                                                                    TACTAAGTGGAAATGTTAGGATTTTTTCGGCATCGCATGTTAGAATCTCTAAAATTTAAAC 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                            164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACTTGGTACTACACCCAGAAACTCAAAATTGTC-TTTCTCCTGATGAGATAT-GGGTGT 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                TGATANATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACAT
                                                                                                                                                                                ATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATATCAT
                                                                                                                                                                                                                 ATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATATCAT
                                                                                                                                                                                                                                                              ACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTTAGAGATATTCAAGCAATGC
                                                                                                                                                                                                                                                                                                                                                                                               reaarrerrrarreaer-egrerreeaeararreegraarreegrage
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Treaaaraecaaarre-ccacacaerraacreearaeaccaceracereerearcaraac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ccririrgiacercraegec---raegraaccaeregaereariararage-aaarege
                                9; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TIGHATCCAGAGICTICCIGICATIGIAAIAAAAAITTATTAAAAA 1612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N
 DB 6; Length 580;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16; Indels
                5e-95;
/ Match 29.3%; Score 475; DB Local Similarity 95.7%; Pred. No. 5e-99nes 563; Conservative 0; Mismatches
                                                                                                                                                    220
                                                              1025
                                                                                                                       1085
                                                                                                                                                                                  1145
                                                                                                                                                                                                               460
                                                                                                                                                                                                                                              1205
                                                                                                                                                                                                                                                                                                       1265
                                                                                                                                                                                                                                                                                                                                                                  1325
                                                                                                                                                                                                                                                                                                                                                                                                                              1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1565
                                                                                           580
                                                                                                                                                                                                                                                                          400
                                                                                                                                                                                                                                                                                                                                      340
                                                                                                                                                                                                                                                                                                                                                                                               281
                                                                                                                                                                                                                                                                                                                                                                                                                                                          222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            49
 Query Match
                               Matches
                                                                                                                                                                                                                                                         · . 8
                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                역
연
경
경
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                              8 8
                                                                                                                                               g
                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    쉱
                                                                                                                   ò
                                                                                                                                                                      \dot{\delta}
```

```
Thyroid cancer related gene sequence SEQ ID NO:5383.
                ABL67046/C
ID ABL67046 standard; DNA; 580 BF
X AC ABL67046;
XX
DT 15-MAY-2002 (first entry)
XX
DE Thyroid cancer related gene se
RESULT 5
```

BP.

```
Screening for anti-neoplastic agent involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature gene set.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes a method (M1) for screening for an antineoplastic agent. The method involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, determining a change in
               Human; cancer; colon; breast; ovary; oesophagus; kidney; thyroid;
stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous;
cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Horrigan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ebner R, Endress G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 5383; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Carter KC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-0235711P.
2000US-0235720P.
2000US-0235840P.
2000US-0235863P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-0236891P.
2000US-0237172P.
2000US-0237173P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-0CT-2000; 2000US-0237606P
03-0CT-2000; 2000US-023760BP
01-NOV-2000; 2000US-0244867P
01-NOV-2000; 2000US-0245084P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0236028P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0236032P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0236111P.
2000US-0236842P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0237278P.
2000US-0237294P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-0CT-2000; 2000US-0237425P.
03-0CT-2000; 2000US-0237598P.
03-0CT-2000; 2000US-0237604P.
                                                                                                                                                                                                                                                                                                                                                                                               2000US-0233617P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0234052P
                                                                                                                                                                                                                                                                                30-MAY-2001; 2001WO-US010838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Augustus M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Weaver Z;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AVAL-) AVALON PHARM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PI; 2002-188264/24.
                                                                                                                                                                                    WO200194629-A2
                                                                                                                                                                                                                                                                                                                                                05-JUN-2000; 2
18-SEP-2000; 2
20-SEP-2000; 2
20-SEP-2000; 2
20-SEP-2000; 2
22-SEP-2000; 2
22-SEP-2000; 2
25-SEP-2000; 2
25-SEP-2000; 2
25-SEP-2000; 2
25-SEP-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-SEP-2000;
25-SEP-2000;
25-SEP-2000;
26-SEP-2000;
26-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22 - SEP - 2000;
28 - SEP - 2000;
28 - SEP - 2000;
28 - SEP - 2000;
28 - SEP - 2000;
28 - SEP - 2000;
29 - SEP - 2000;
29 - SEP - 2000;
20 - OCT - 2000;
02 - OCT - 2000;
02 - OCT - 2000;
02 - OCT - 2000;
03 - OCT - 2000;
04 - 2000;
05 - OCT - 2000;
06 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - OCT - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 2000;
07 - 
                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Young PE,
Soppet DR,
                                                                                       gene; ds.
^{\circ}
```

ŝ

```
1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGAGGAC 1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACTIGGIACTACCCCAGAAACTCCAAAATTGTCTTTTCTCCTGATGAGATATGGGGTGT 1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTTTTGTACGTCTAGGGCTACCCAAGTGAAGTGAATATATAAGCAAAATGTGT 1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTTAAAC 1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATATCAT 1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTCCTAATATCCATACGCAAGTGTTTTATGACACAAATTCACTAGTCTGGTTTAAAAA 1324
expression of at least one gene (I) of a signature gene set, where (I) comprises a sequence (S) selected from 8447 sequences (given in ABL61664 to ABL70110), or is at least 95% identical to (S), where a change in expression is indicative of anti-neoplastic activity. (I) has cytostatic activity and can be used in gene therapy. MI can be used for screening an anti-neoplastic agent, and can be used for producing a product which is the data collected with respect to the anti-neoplastic agent as a result of MI, and the data is sufficient to convey the chemical structure and/or properties of the agent. MI can be used in the treatment of cancer such as colon, breast, stomach, lung, thyroid, oscophagoal, ovarian, kidney, prostate or pancreatic cancer, adenocarchnoma, carcinoma, clear cell cancer, infiltrating ductal cancer, infiltrating ductal cancer, infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine carcinoma, papillary carcinoma and Wilm's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Trgadatagcadatrg-ccacacacrtaacrggaragaccacgracgrggrgarcaraac 164
                                                                                                                                                                                                                                                                                                                                                                                                                                      TGATANATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACAT 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCATTAACTATGAAAGCTTTTAATTCCTAAAATAGTTTTAGAGATATTCAAGCAATGC 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  105 ccititigitacetetadece---raderaaceaereaeratiatatrade-aaatetet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTTAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1025 TGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGC
                                                                                                                                                                                                                                                                                                                                                                    ٠<u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TIGIATCCAGAGICTTCCTGTCATTGTAATAAAAATTTATTAAAAA 1612
                                                                                                                                                                                                                                                                                                                            Query Match
29.3%; Score 475; DB 6; Length 580;
Best Local Similarity 95.7%; Pred. No. 5e-95;
Matches 563; Conservative 0; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 580 BP; 198 A; 98 C; 96 G; 187 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                    580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             222
                                                                                                                                                                                                                                                            tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

Screening for anti-neoplastic agent involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, and determining a change in expression of a gene of a signature gene set. The present invention describes a method (M1) for screening for an anti-neoplastic agent. The method involves exposing cells to a chemical agent to be tested for anti-neoplastic activity, determining a change in expression of at least one gene (I) of a signature gene set, where (I) comprises a sequence (S) selected from 8447 sequences (given in AbL61664 stomach; lung; prostate; pancreas; carcinoma; antitumour; cancerous; cytostatic; gene therapy; antineoplastic; Wilm's tumour; adenocarcinoma; ŝ ο̈ Endress Ebner Claim 1; SEQ ID NO 2660; 44pp; English. Carter KC, 18-SEP-2000; 2000US-0234017P.
20-SEP-2000; 2000US-0234019P.
20-SEP-2000; 2000US-0234034P.
22-SEP-2000; 2000US-0234509P.
22-SEP-2000; 2000US-0234559P.
25-SEP-2000; 2000US-0234557P.
25-SEP-2000; 2000US-0235280P.
25-SEP-2000; 2000US-0235280P.
25-SEP-2000; 2000US-0235280P.
25-SEP-2000; 2000US-0235280P.
25-SEP-2000; 2000US-0235280P.
26-SEP-2000; 2000US-0235280P.
27-SEP-2000; 2000US-0235280P.
27-SEP-2000; 2000US-0235280P.
27-SEP-2000; 2000US-0235280P.
27-SEP-2000; 2000US-023580P.
28-SEP-2000; 2000US-023580B.
28-SEP-2000; 2000US-0235603P.
28-SEP-2000; 2000US-023603P.
28-SEP-2000; 2000US-023603P.
28-SEP-2000; 2000US-023603P.
28-SEP-2000; 2000US-023603P.
28-SEP-2000; 2000US-023603P.
28-SEP-2000; 2000US-023603P.
28-SEP-2000; 2000US-023603P.
28-SEP-2000; 2000US-023603P.
28-SEP-2000; 2000US-023603P.
28-SEP-2000; 2000US-023603P.
28-SEP-2000; 2000US-023603P.
28-SEP-2000; 2000US-023603P.
28-SEP-2000; 2000US-023603P. 2000US-0237173P. 2000US-0237278P. 2000US-0237294P. 30-MAY-2001; 2001WO-US010838 Augustus M, Weaver Z; (AVAL-) AVALON PHARM. WPI; 2002-188264/24. 29-SEP-2000; 2 29-SEP-2000; 2 02-OCT-2000; 2 02-OCT-2000; 2 02-OCT-2000; 2 02-OCT-2000; 2 02-OCT-2000; 01-NOV-2000; 03-OCT-2000; Homo sapiens. 18-SEP-2000; Young PE, , Soppet DR, 13-DEC-2001 gene; da

```
1444
                                                                                                                                                                                                                                                                                                                                          1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACTIGGTACTACACCCAGAAACTCAAAATTGTCTTTTCTCCTGATGAGATATGGGGTGT 1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCTGGTTTAAAA 1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGGAC 1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTTTTGTACGTCTAGGGCCTAGGGTACCCAAGTGAAGTGAATATATAAGCAAAATGTGT 1564
to ABL70110), or is at least 95% identical to (S), where a change in actression is indicative of anti-neoplastic activity. (I) has cytostatic activity and can be used in gene therapy. M can be used for screening an anti-neoplastic agent, and can be used for producing a product which is the data collected with respect to the atti-neoplastic agent as a result of MI, and the data is sufficient to convey the chemical structure and/or properties of the agent. MI can be used in the treatment of cancer such as colon, breast, stomach, lung, thyroid, oesophageal, ovarian, kidney, prostate or pancreatic cancer, adenocarcinoma, carcinoma, clear cancer, infiltrating ductal cancer, infiltrating lobular cancer, squamous cell carcinoma, neuroendocrine carcinoma, papillary carcinoma and Wilm's
                                                                                                                                                                                                                                                                                                                                                                                                                 TACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTTAAAC 1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGC 1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                     461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           223
                                                                                                                                                                                                                                                                                                                                                                               521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Africararraharakarakararrakarrahararrahararraharakararrah 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGC 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ricanariaccanarie-ccacacacriranciccaracaccacciccicciccicarcarance 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         reaarrichtararreact-egreirceacararricagraarricigrareagagac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACTTGGTACTACACCCCAGAAACTCAAAATTGTC-TTTCTCCTGATGAGATAT-GGGTGT
                                                                                                                                                                                                                                                                                                                                                                   TGATANATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ccititigracercraeecc---raeeraaccaereaerearrararraec-aaarerer
                                                                                                                                                                                                                                                                                                                                            TGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACAT
                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                            ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TIGIAICCAGAGICTICCIGICATIGIAAIAAAAATITIAIAAAA 1612
                                                                                                                                                                                                                                                                      DB 6; Length 580;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TIGHTHICAGAGTCTTCCTGTCATTGTAATAAAAAATTTATTTAAAAA
                                                                                                                                                                                                                                                                                                          16; Indels
                                                                                                                                                                                                                                    Sequence 580 BP; 198 A; 98 C; 96 G; 187 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                      Score 475; DB 6
Pred. No. 5e-95;
                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 95.7%;
Matches 563; Conservative
                                                                                                                                                                                                                                                                                                                                                1025
                                                                                                                                                                                                                                                                                                                                                                                                                     1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1565
                                                                                                                                                                                                                                                                                                                                                                                580
                                                                                                                                                                                                                                                                                                                                                                                                                                                       520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            281
                                                                                                                                                                                                     tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ર્જ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         쉱
       8888888888888888
                                                                                                                                                                                                                                                                                                                                                8 6
                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                             원
장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
```

```
1229 TTCCTAAAATAGTTTTAGAGAT 1251
                   Matches 199; Conservative
                                                                                                                                                                                                                    1049
                                                                                                         66
                                                                                                                                929
                                                                                                                                                                          989
                                                                                                                                                                                                                                         279
                                                                                                                                                                                                                                                               1109
Query Match
           Local
                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                             셤
                                           ò
                                                             원
                                                                                    ò
                                                                                                     g
                                                                                                                              ò
                                                                                                                                                셤
                                                                                                                                                                      ર્જ
                                                                                                                                                                                         g
                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                              Human; immune system disease; cytosine methylation; antiasthmatic;
antiarteriosclerotic; antianaemic; cytostatic; nootropic;
neuroprotective; anti-HIV; anticonvulsant; ophthalmological;
                                                                                                                                                                                                                                                                                                          system associated gene SEQ ID NO: 1219
                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                             ABL33246 standard; DNA; 6077
                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                              Human immune
                                                                                                                                                                                                                                                                                        26-MAR-2002
                                                                                                                                                                                                                                                                   ABL33246;
```

ABL33246
ID ABL3
XX ABL3
XX ABL3
XX ABL3
XX ABL3
XX Huma
XX Huma
XX Huma
XX Huma

RESULT

```
1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention provides a number of human immune system associated genes which are modified by the methylation of cytosines. The sequences can be used in the diagnosis and treatment of immune system disorders, including eye diseases such as retinopathy, neovascular glaucoma and macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid leukaemia, Alzheimer's disease, AIDS, epilepsy, neurofibromatosis, rheumatoid arthritis, poortaais and inflammatory/ulcerative bowel diseases. The present sequence is a gene of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              fragment of chemically modified gene, useful for of diseases associated with abnormal cytosine
antirheumatic; antiarthritic; antidiabetic; antipsoriatic;
antiinflammatory; cancer; eye disease; arteriosclerosis; anaemia;
acute myeloid leukaemia; Alzkeimer & disease; ALDS; epilepsy;
neurofibromatosis; rheumatold arthritis; psoriasis; bowel disease; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           869 TGGACGCTCAGGTTATGATATGTTATGAAAATAAGCTTCATTATTTCTTATAGCTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCIATTATTCCCTTTTAGAAACAAGAATAACAATAAGTTTTAATAGTTGCCATACTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   159 AATTATTTAATAGTTÄTTGTTÄÄÄÄTGTÄTÄÄÄÄTTTTTGTTTTTTGTCGTAÄTÄTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCTATGGGAAATTAGAACTGGCACAACCCTGACATTACTAAGTGGAAATGTTAGGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      169 GCTTTTATCAATATGAATTCTGAAGGCCAATATCATACCATTAACTATGAAAGCTTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         399 TTATATTTGAAAATAATTATATTTATATTATTTTGGAGATTTATGGAGATGTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       39 GGATTATTTAGAAAGTGATTGAGTTAAGTTTTAAATTTTTATATTTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAAAAGTTTATATTTGTATAATTTAATTTGGGTTTTTTGGTTGGGAGTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATITIATCAGGICTAATGAAACCAATATTGAATCTCTGATAAATATTTTCTGATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TICGGCAICGCAIGITAGAAICICTAAAAITTAAAACAIICCIGITAAAIGACTAAAGGITIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       339 iindarrindreidiintakiriahrahaharaharaharaharah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             809 GCAATATCAAATAAGTGTATGTCCTCTCAAATGAGGCATTTTTAATTGTTACAATCTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 6077 BP; 1524 A; 185 C; 1391 G; 2977 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.2%; Score 52.6; DB 6; Length 6077; Similarity 44.9%; Pred. No. 0.098; Onservative 0; Mismatches 244; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ID NO 1219; 32pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                  Ä
                                                                                                                                                                                                                                                     02-JUL-2001; 2001WO-EP007537.
                                                                                                                                                                                                                                                                                             30-JUN-2000; 2000DE-01032529
01-SEP-2000; 2000DE-01043826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    acid comprising is and treatment
                                                                                                                                                                                                                                                                                                                                                                                                    Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                          (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-130909/17.
                                                                                                                                                                       WO200200928-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ
                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      diagnosis an methylation.
                                                                                                                                                                                                               03-JAN-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic
```

ö

ω

us-10-051-835-15.rng

```
셤
                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \dot{\delta}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                        g
                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   lymphocytic leukaemia and acute myelogenous leukaemia, as probes for determining the cytosine methylation state and/or single nucleotide polymorphisms (SNDs) of haematopoietic cell proliferation disorder related sequences and their complements; and as primers for the amplification of haematopoietic cell proliferation disorder related DNA sequences. The nucleotide sequences from the present invention can also be used for detecting a predisposition to, differentiation between habotaepses, diagnosis, prognosis, treatment and/or monitoring of haematopoietic cell proliferative disorders. The present method enables a highly specific classification of haematopoietic cell proliferation of haematopoietic cell proliferation of haematopoietic cell proliferation of haematopoietic cell proliferation of haematopoietic cell proliferation of haematopoietic cell proliferation of haematopoietic cell proliferation of haematopoietic cell proliferation of haematopoietic cell proliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Detecting and differentiating between hematopoietic cell proliferative disorders, comprises contacting a target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Howe A, Mueller J;
G, Lesche R, Leu E;
Mueller V, Otto T, Pelet C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes a method for detecting and differentiating between haematopoietic cell proliferative disorders associated with at least 1 gene and/or their regulatory regions in a subject. The method comprises contacting a target nucleic acid in a biological sample obtained from the subject with at least 1 reagent, which distinguishes between methylated and non-methylated CpG dinucleotides within the target nucleic acid. ABZ09861 to ABZ1118 represent specifically claimed nucleotide sequences from the present invention. Oligonucleotides from the present invention can be used; for differentiating between halfty hamatopoietic cells and proliferative disorder haematopoietic cells; for differentiating between acute
                                                                                                                                                                                                                                                                                                                                              Haematopoietic cell proliferation disorder related DNA sequence #240.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         disorders allowing for improved and informed treatment of patients
                                                                                                                                                                                                                                                                                                                                                                                               Human; haematopoietic cell proliferation disorder; cytostatic; gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia; cytosine methylation state; gene; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.2%; Score 51.8; DB 7; Length 8056; 42.3%; Pred. No. 0.16; tive 0; Mismatches 547; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence, 8056 BP; 3711 A; 371 C; 371 G; 3603 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Guetig D,
n P, Grabs C
Model F, N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 28; SEQ ID NO 240; 117pp; English.
an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Berlin K, Braun A, Distler J,
Olek A, Piepenbrock C, Adorjan
Lawin A. Lipscher E, Maier S,
                                                                                                                                                                          ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAR-2002; 2002WO-EP003401.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-MAR-2001; 2001US-0278333P
                                                                                                                                                                       ABZ10100 standard; DNA; 8056
                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity 42.3
)3; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lipscher E, Ziebarth H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ÅĞ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (EPIG-) EPIGENOMICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-018942/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200277272-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Olek A, Pie
Lewin A, Li
Schwope I,
                                                                                                                                                                                                                                                                                      16-JAN-2003
                                                                                                                                                                                                                              ABZ10100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                               RESULT 8

A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME AND A BEZIOLO

NAME 
                           셤
```

```
CATITIATICAGGICTAATGAAACCAATATTGAATCTCTGATAAATATTTTCTGATGTTACT 1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGCTCTCCTAATATCCATACGCAAG 1286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTGTTTATGACACAAATTCACTAGTCTGGTTTAAAAATGAAATCTTTATATTGACTGGG 1346
688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           869 TGGACGCTCAGGTTATGATATGTTTATGAAAATAAGCTTCATTATTTCTTATAGCTACA 928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTATTATTCCCTTTTAGAAACAAGAATAACAATAAGTTTTAATAGTTGCCATACTTAG 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        575 ATTITITATATTITATAATATTATAAAAAAAATATTATATAAATTITTAAAATTITTT 634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          749 ITGTIGTATACCCATTGGCCAGGGCCTTTATAAGGACTCCCAAAAGCATTTTGAAGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAGATTAAAGTGTGCATTCTTTGTTTCCTAAAATATGATTTTACTGCTTGAAATTACATT
                                                                                                                                                                                                                         216 iraaaaaarrirraaaarrirraaaaarriraaaarrrraaaarrrraaarrirraaarrirra
                                                                                                                                                                                                                                                                           CCTTTGAAAACTGATTGATAAATATATTCCCCCCTCCTTTAGAAACAGTCAAAAGCCACTT
                                                                                                                                                                                                                                                                                                                        689 CAAACAAGTTTCAAAATAAAGGAAGGTAGCAAGTTAGGCGATGGATTATATTTTCTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         809 GCAATATCAAATAAGTGTATGTCCTCTCAAATGAGGCATTTTTAATTGTTACAATCTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1049 AGCTATGGGAAATTAGAACTGGCA--CAACCCTGACATTACTAAGTGGAAATGTTAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITICGGCATCGCATGITAGAATCTCTAAAATTTAAACATTCCTGTTAAATGACTAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1167 TTGCTTTTATCAATATGAATTCTGAAGGCCAATATCATACCATTAACTATGAAAGCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           875 AAAAATTTCGTAATTATTTAATTTTTTAATTATTTTCGTCGTTTTCGTAATAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAGTTGAAGTTTAGAAACTAACATAGCATTAATATGAATAATGCATGGAAAATTATTAT
                                                                                                                         Haematopoietic cell proliferation disorder related DNA sequence #386.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1347 TGTCCCACATATTCCAGTAATTTCTGTTATGAGAGGACTTGAAATAGCAAATT 1399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITIAAAAAITATITITAAAAITITITITITATITITITAATITICGAAATI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABZ10246 standard; DNA; 8056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1227
                                                                                                                                                                                                                                                                           629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             989
                                                                                                                               156
                                                                                                                                                                            569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABZ10246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        日本なななはは田
```

403;

Matches

ઠે

```
Human; haematopoietic cell proliferation disorder; cytostatic; gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia; cytosine methylation state; gene; ds.
                                                     26-MAR-2002; 2002WO-EP003401.
                                                                26-MAR-2001; 2001US-027833P.
                                                                          (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 332; Conserv
                                  WO200277272-A2
                         Homo sapiens
                                             03-OCT-2002.
                                                                                               Lewin A, L
                                                                                                                                                                                                                                                                                                                         564
                                                                                                                                                                                                                                                                                 Query Match
                                                                                        olek A,
g
                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                     ð
```

The present invention describes a method for detecting and differentiating between haematopoietic cell proliferative disorders associated with at least 1 gene and/or their regulatory regions in a suscicited with at least 1 gene and/or their regulatory regions in a biological sample obtained from the subject with at least 1 reagent, which distingishes between methylated and non-methylated Oped dinucleotides within the target nuclecic acid. ABZ09861 to ABZ1118 represent specifically claimed nucleotide sequences from the present invention. Oligonucleotides from the present invention. Oligonucleotides from the present invention. Oligonucleotides from the present invention. Oligonucleotides from the present invention and proliferative disferentiating between healthy haematopoietic cells and proliferative classification of haematopoietic cell proliferation disorder determining the cytosine methylation state and/or single nucleotide polymorphisms (SNPs) of haematopoietic cell proliferation disorder related sequences and their complements; and as primers for the cytosine method sequences from the present invention can also be used for detecting a predisposition to, differentiation between complements and on the present invention can also be used for detecting a predisposition to, differentiation between complements allowing for improved and informed treatment of patients 1696 haharitaharaharaharaharaharahaharahitaharahahahahahah 1755 Detecting and differentiating between hematopoietic cell proliferative disorders, comprises contacting a target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides. 624 ATTATCCTTTGAAAACTGATTGATAAATATTTCCCCCTCCTTTAGAAACAGTCAAAAGC 683 , Braun A, Distler J, Guetig D, Howe A, Mueller J; Piepembrock C, Adorjan P, Grabs G, Lesche R, Leu E; Lipscher E, Maier S, Model F, Mueller V, Otto T, Pelet C; I, Ziebarth H; 504 TAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAAATAGATTTGATTTTACTGCTTGAAATT ACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTAATATGAATAATGCATGGAAAATT 684 CACTICAAACAAGIIIICAAAAIAAAGGAAGGIAGCAAGIIAGGCGAIGGAIIAIAIIIIIC 10; 3.2%; Score 51.2; DB 7; Length 8056; llarity 43.7%; Pred. No. 0.21; Conservative 0; Mismatches 418; Indels 10 Sequence 8056 BP; 3711 A; 0 C; 371 G; 3974 T; 0 U; 0 Other; Claim 28; SEQ ID NO 386; 117pp; English. WPI; 2003-018942/01.

ద

g

ठ

1161 1996 AAAİTİTAALAAATTITAAAİTALAAAİAAAİTAİAİTATTITIAAAİAİTİTİTİTİTİTİ 2175 DNA transcription associated gene; peptide nucleic acid; PNA-oligomer; PNA, cytosine methylation state; SNP; retroviral infection; gene; ds: single nucleotide polymorphism; adenosine deaminase deficiency; cancer; viral infection; Sezary syndrome; haematological disorder; tuberculosis; immunological disorder; Werner syndrome; developmental disorder; psoriasis; Rieger's syndrome; neurological disorder; erythropoiesis; myelodysplastic syndrome; merological disorder; erythropoiesis; myelodysplastic syndrome; myeaching syndrome; Niemann-Pick disease; myelodysplastic syndrome; myeaching infarction; hypertension; arthritis; polyglutamine disorder; solid tumour. 924 CTACATCCTATTATT--CCCTTTTAGAACAAGAATAACAATAAGTTTTAATAGTTGCCA 981 804 GAATGGCAATATCAAATAAGTGTATGTCCTCTCAAATGAGGCATTTTTAATTGTTACAAT 982 TACTTAGCATTTATCAGGTCTAATGAAACCAATATTGAATCTCTGATAAATATTTTCTGA TGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACATTACTAAGTGGAAAATGTT 1102 AGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTTAAACATTCCTGTTAAATGACT AAGGITITGCITITIAICAAIAIGAAITCIGAAGGCCAAIAICAIACCAITAACIAIGAAAG 744 TIGGCIIGIIGIATACCCATIGGCCAGGCCTTTATAAGGACTCCCAAAAGCATTTIGAA 1222 CTTTTAATTCCTAAAATAGTTTTAGAGATATTCAAGCAA 1261 2348 Tritradararrrrrrrrrrrrrrrranararrrarrana 2387 DNA transcription associated genomic DNA #141. ; 2000DE-01019058. ; 2000DE-01019173. ; 2000DE-01032529. ; 2000DE-01043826. 407/c ABK28407 standard; DNA; 9504 06-APR-2001; 2001WO-EP003973 (first entry) WO200192565-A2 07-APR-2000; 30-JUN-2000; 01-SEP-2000; 06-APR-2000; 23-APR-2002 06-DEC-2001 2236 1162 ABK28407; 1042 2176 RESULT 10 ABK28407/c g ò 셤 B & ઠે g 8 엄 ઠે 심 엄 ઠે 요 à ద ઠે à

```
antiarteriosclerotic; ds
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ્ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                 The invention relates to a nucleic acid, which comprises a segment of the chemically pretreated DNA of genes associated with DNA transcription from one of 346 sequences, and an oligomer, in particular an oligomuclectide or peptide nucleic acid (PNA) -oligomer that hybridises to or is identical transcription. The set of oligomer probes are useful for detecting the cytosine methylation state and/or single nucleic acids are useful for detecting the cytosine methylation state and/or single nucleic acids are useful for diagnosing or treating diseases associated with DNA transcription diagnosing or treating diseases associated with DNA transcription (particularly with the methylation state), e.g. adenosine deaminase deficiency, viral infection, retroviral infection, sezary syndrome, nearcological disorders, immunological disorders, wardenburg tuberculosis, developmental disorders, psoriasis, Rieger's syndrome, neurodegenerative disorders, wardenburg syndrome, Niemann-Pick disease, myelodysplastic syndrome, myervelopmental disorders, polyglutamine disorders, solid tumours or cancer. Sequences ABK28127-ABK28472 represent DNA transcription associated genomic DNA molecules of the invention. Note: The sequence data for this patent did not form part of the printed specification but was obtained in electronic format directly from the European Patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7045 ATTTTTAATTATTAACTATTTTTTTTATCAACTAATTAATATTCCATAAAATTAAAAATC 6986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          966 GITITAATAGTIGCCATACTIAGCATTIATCAGGICTAATGAAACCAATATIGAATCTCT 1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6925 TITCAAAIAACITCTAITTTAAATAATCTATATTTAAAATAATAATAAAAACATCTACITA 6866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            846 ATTTTTAATTGTTACAATCTATTTGGACGCTCAGGTTATGATATGTTTATGAAAAAAAG 905
                                                                                          New nucleic acids or oligomers, useful for diagnosing or treating diseases associated with DNA transcription, e.g. immunological disorders, Werner syndrome, psoriasis, myocardial infarction, solid tumors or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; angiogenesis; methylation; eye disease; glaucoma; tumour;
inflammation; rheumatord arthritis; diabetic retinopathy; antiulcerds;
macular degeneration; inflammatory bowel disease; Crohn's disease;
antirheumatic; antiarthritic; antidiabetic; antipsoriatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           906 CTTCATTATTTCTTATAGCTACATCCTATTATTCCCTTTTAGAAACAAGAATAACAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 9504 BP; 2528 A; 138 C; 1853 G; 4985 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.1%; Score 50.6; DB 6; Length 9504;
53.9%; Pred. No. 0.3;
ive 0; Mismatches 89; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human angiogenesis associated polynucleotide SEQ ID NO 123
                                                                                                                                                                         Claim 1; SEQ ID NO 281; 32pp; English
                                Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВР.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABQ67093 standard; DNA; 83391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 53.9
Matches 104; Conservative
                              Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1026 GATAAATATTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6865 AAAAAATATTTCC
EPIGENOMICS AG
                                                               WPI; 2002-090046/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABQ67093;
                                olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EXEXEXEXEX
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
19871 CTCTTAATAACTAAAATTAAATAATATATTTTAAAATATCTATCTAAAACCAATAA 19812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19632 papapaccipapapapapaccapapaparceritapapciticapcipapatincapacti 19573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19572 ATTAAAATAACTAATTTCAAAATAACTATTAAAAAATAAAATAACCTTCTAATACRACCAAT 19513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITACIGCIIGAAAITACAITIGAGIIGAAGIITAGAAACIAACAIAGCAITAAIAIGAA 607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAIGGATTATATTTTCTTGGCTTGTTGTATACCCATTGGCCAGGGCCTTTATAAGGACTC 787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             788 CCAAAAGCATTTTGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTCAAATGAGGCAT 847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              428 CCCTTAAGGAACTTATAATTAATGATGATCTGAATAAACATACCAGGATAAAGATGTCAA 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                848 TITIAATIGITACAATCIATITGGACGCTCAGGTTATGATATGTTTATGAAAAAAAAAGCT 907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a nucleic acid (I) comprising a segment of 18 bases of chemically pretreated DNA of angiogenesis-associated genes (II) having sequences (RABG6717-ABG67178) or their complements. (I) also related oligomers, are used to evaluate the methylation status and/or single-nucleotide polymorphisms, in angiogenesis-related genes, for adagnosis and treatment of eye diseases, proliferative retinopathy, necular degeneration caused by neovascularitis, diabetic retinopathy, macular degeneration caused by neovascularisation, psoriasis, arteriosclerosis, inflammacrory bowel diseases, ulcers and crohn's disease. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               488 ATGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAAATATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        듸
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 83391 BP; 25113 A; 665 C; 16761 G; 40835 T; 0 U; 17 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New nucleic acid fragments from chemically treated angiogenesis-
associated genes, useful for determining methylation status, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.1%; Score 50.4; DB 6; Length 83391;
43.8%; Pred. No. 0.53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches 341; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 123; 41pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            associated genes, useful for dete
diagnosis or treatment of cancer.
                                                                                                                                                                                                                  06-DEC-2001; 2001WO-EP014320.
                                                                                                                                                                                                                                                                                          06-DEC-2000; 2000DE-01061338.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 43.8
Matches 266; Conservative
                                                                                                                                                                                                                                                                                                                                                                 (EPIG-) EPIGENOMICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-500450/53.
                                                                   WO200246454-A2
Homo sapiens.
                                                                                                                                           13-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                             Schacht 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      728
```

```
The invention relates to a recombinant entomopox virus (EPV) vector, comprising a polynucleotide encoding a protein operably linked with a comprising a polynucleotide encoding a protein also concerns methods for heterologous promoter sequence. The invention also concerns methods for providing gene therapy for genetic deficiency disorders. Vectors of the invention are useful for delivering a polynucleotide encoding a protein to a vertebrate cell preferably a mammalian cell, such as a human cell. The vector is introduced into the vertebrate cell by infection in a viral particle, or by transfection, transduction, or injection either in vitro article, or by transfection, transduction, or injection either in vitro biologically useful proteins in gene therapy proteocls, and for delivering large DNA segments for engineering of vertebrate cells. Delivering large DNA segments for engineering of vertebrate cells. Polynucleotides of the invention have applications in techniques such as their use as insertion sites for foreign genes of interest, hybridisation probes, for chromosome and gene mapping, in PCR technologies, and in the production of sense or antisense mucleic acids. Vectors of the invention probes, for chromosome and gene mapping, in PCR technologies, and in the provide for stable integration and expression of heterologous polynucleotide inserts which can be delivered in an infected or transformed cell and fragment of the genue of the genue B entomopoxvirus from ameacta moorei (AmEPV)
19392 СТАТАТТАТАТАТТАТАТАСААТАТАТААТААТААСТТТТТАААААТАТАТАТААААТСТАТАА 19333
                                                                                                                                                                                                                                                                                               19332 AAAAAAATRTRAAAAACTATAAAAAATCATATTAAAAACTCGACTACATAAACTATAC 19273
                                                                                                                                                                                                                       TTTAATAGTTGCCATACTTAGCATTTATCAGGTCTAATGAAACCAATATTGAATCTCTGA 1027
                                                                       TCATTATTTCTTATAGCTACATCCTATTATTCCCTTTTAGAAACAAGAATAACAATAAGT 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           therapy; viral vector; chromosome mapping; gene mapping; iciency disorder; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel recombinant entomopox virus vector useful for delivering polynucleotide encoding protein to vertebrate cell, comprises polynucleotide encoding protein operably linked with heterologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 226-242; 326pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABL56203 standard; DNA; 32392 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amsacta moorei entomopoxvirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-AUG-2001; 2001WO-US025287.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-AUG-2000; 2000US-0224479P.
14-SEP-2000; 2000US-00662254.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Li Y, Bawden AL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                   19272 ATCATATT 19265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       fragment#5
                                                                                                                                                                                                                                                                                                                                                                       1028 TARATATT 1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UYFL ) UNIV FLORIDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-227161/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AmEPV; gene therapy
genetic deficiency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      promoter sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200212526-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AmEPV genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-FEB-2002,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Moyer RW,
                                                                                                                                                                                                                       968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABL56203;
19452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
ABL56203/c
ABL56203/c
XX
ABL56203/c
DT AL DT OL -UU
DT OL -UU
XX
AMEDY
XX
AMEDY
XX
AMEDY
XX
AMEDY
XX
AMEDY
XX
AMEDY
XX
AMEDY
XX
AMEDY
XX
AMEDY
XX
AMEDY
XX
AMEDY
XX
AMEDY
AMEDY
AMEDY
AMEDY
XX
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AMEDY
AME
                                                                                                                               B
                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                   8
```

```
1030
                                                                                                                                              1327 AAATCAGTATATAGTAAAACAGAAGAAGAGGAGTAATTCTGTTATTAACGTGATATCTGAT 1268
                                                                                                                                                                                                                   1267 AATAAATTAAAAAAGTTTAGCAGAAGATATATCTTTAAAAAGAGGATGTATAAAAGAA 1208
                                                                                                                                                                                                                                                                                                                                                   1148 ATATTATATCAAAAATTATTATCTTTTGATTAT-AATAATAAAAAAAATATAATAG 1090
                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  730 TATTAGTATTAATAAATTTATAAATATTAGATATCTTATCAAATTTATAAAAATAT 671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITGGACGCTCAGGTTATGATATGTTTATGAAAATAAGCTTCATTATTTCTTATAGCTA 926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             927 CATCCTATTATTCCCTTTTAGAAACAAGAATAACAATAAGTTTTAATAGTTGCCATACTT 986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1089 IGIGIGGIAAAATIGAIGGAATIAITAACGAIGIAITAAITGAAAGCAAAAATCGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACAAGTTTCAAAATAAAGGAAGGTAGC----AAGTTAGGCGATGGATTATATTTTCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           969 TATTGAATTATAAAAAGAGTAAATTGATTCAACATTATGATAACGAAATAGATGTAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            909 ATTATATACCCGACGACAATTATTTTCTGAAATATGTAATAATAATATAATATTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  987 AGCATTTATCAGGTCTAATGAAACCAATATTGAATCTCTGATAAATATTTTTCTGATGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   047 CTAGCTATGGGAAATTAGAACTGGCACAACCCTGACATTACTAAGTGGAAATGTTAGGAT
                                                                                                                                                                                                                                                 GATTAAAGTGTGCATTCTTTGTTTCCTAAAATATGATTTTACTGCTTGAAATTACATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>raaaangurina-graarahahanahanahagarrarahahaanaanrinaarraa</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1107 TITICGGCATCGCATGTTAGAATCTCTAAAATTTAAACATTCCTGTTAAATGACTAAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1167 ITGCTTTATCAATATGAATTCTGAAGGCCAATATCATACCATTAACTATGAAAGCTTTT
                                                                                                                                                                                                                                                                                   GATTATAATATAGATT-TATATGAGAAAAATATATAATGTAAATATAACAAATAGAAATAA
                                                                                                                                                                                                                                                                                                                      571 AGTTGAAGTTTAGAAACTAACATAGCATTAATATGAATAATGCATGGAAAATTATTATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>aaagactatroaaatacatroctatatataaaaagircaattagaatatatritr</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       747 GCTTGTTGTATACCCATTGGCCAGGCCTTTATAAGGACTCCCAAAAGCATTTTGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             807 TGGCAATATGAAATAAGTGTATGTCCTCTCAAATGAGGCATTTTTAATTGTTACAATCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   670 maccahahamannahcahannahngamamannahnahahahahmahmmahahmma-
                                                                                                                 GATGATCTGAATAAACATACCAGGATAAAGATGTCAAATGAGTGTGACTCCCTTAAAGTA
                                                                                                                                                                                                                                                                                                                                                                                     TITGAAAACTGATTGATAAATATATTCCCCCTCCTTTAGAAACAGTCAAAAGCCACTTCA
                Sequence 32392 BP; 13748 A; 2577 C; 2550 G; 13517 T; 0 U; 0 Other;
                                                                               8
                                              Length 32392;
                                                                               Indels
                                                                               472;
                                              DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATTCCTAAAATAGTTTTAGAGATATTCAA 1257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATAATAATATCATTATTAATATTATAA 461
                                             Score 49.8; DB
Pred. No. 0.58;
0; Mismatches
                                             3.1%;
illarity 44.9%;
Conservative 0
                                                               Similarity
                                                                Local Simi
                                                                                                                                                                                                                                                     511
                                                                                                                                                                                                                                                                                     1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                         691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          491
                                                                                                                                                                                    451
                                                                                                                                                                                                                                                                                                                                                                                         631
                                                Query Match
                                                                                 Matches
X S
                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                               S 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요 양
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                    ò
                                                                                                                                                                                                                   원
                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
```

AAL15210 standard; cDNA; 883 BP

RESULT 13
AAL15210
ID AAL15
XX
AC AAL15

AAL15210,

```
RESULT 14
                                                                                                                                                             ò
                                                                                               Я
               g
                                     à
                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            260 TITITATAAAAAAAATITITITITITAATITAAAATIANAAATGANGTITAAANTTATT 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    320 TTATTTATTTAAANTAAATTTTTTTTTTAANTTTTAAATTTTNTNTTNATAANTAAAA 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTAATATGAATAATGCATGGAA 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 440 ATTITITAATININNAANNAAAAATININITINAATINAAGGITITAAAANANITIN 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGCCACTTCAAACAAGTTTCAAAATAAAGGAAGGTAGCAAGTTAGGCGATGGATTATAT 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            740 TITCITGGCITGTTGTATACCCATTGGCCAGGGCCTTTATAAGGACTCCCAAAAGCATTT 799
                                                                                                                                                                                                                                                                                                                                    The invention relates to human breast cancer expressed polynucleotides (AALO7544-AAL26789) and methods of assessing whether a patient is afflicted with breast cancer by examining the correlation between the expression of certain markers and the cancerous state of breast cells. The polynucleotides and encoded polypeptides are potential markers for detecting, diagnosing, monitoring, characterising treating and potentially preventing breast cancer. The polynucleotides and encoded polypeptides are also useful for isolating compounds with cytostatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTATAATTAATGATGATCTGAATAAACATACCAGGATAAAGATGTCAAATGAGTGTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 500 CCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAAATATGATTTTACTGCTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New peptide useful as a marker for the diagnosis of breast cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 4; Length 883;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 883 BP; 322 A; 18 C; 23 G; 396 T; 0 U; 124 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.0%; Score 48.8; DB 4; Length 8
38.3%; Pred. No. 0.45;
ive 0; Mismatches 332; Indels
                             cancer expressed polynucleotide 7667.
                                                 Human; breast cancer; cell marker; cytostatic; ss.
                                                                                                                                                                                                                                     (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC
                                                                                                                                                                                                                                                         Wang Y, Steinmann K;
                                                                                                                                                                                                                                                                                                                     Claim 1; Page 1378; 3695pp; English.
                                                                                                                                                                       24-MAR-2000; 2000US-0192099P.
29-MAR-2000; 2000US-0193480P.
15-MAY-2000; 2000US-0205230P.
                                                                                                                                                                                                      09-JUN-2000; 2000US-0211315P.
25-JUL-2000; 2000US-0220534P.
                                                                                                                                                    2000US-0176077P.
2000US-0189167P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          larity 38.3%;
Conservative
                                                                                                                                2001WO-US000798
         (first entry)
                                                                                                                                                                                                                                                                             WPi; 2001-451856/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                        Xu Y,
                                                                                         WO200151628-A2.
                                                                                                                                                             14-MAR-2000;
                             Human breast
                                                                                                                                 10-JAN-2001;
                                                                      Homo sapiens
                                                                                                                                                     14-JAN-2000;
                                                                                                              19-JUL-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    206;
                                                                                                                                                                                                                                                        Lillie J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . ઠે
```

ċ

```
The present invention describes a method for detecting and differentiating between haematopoietic cell proliferative disorders differentiating between haematopoietic cell proliferative disorders associated with at least 1 gene and/or their regulatory regions in a subject. The method comprises contacting a target mucleic acid in a biological sample obtained from the subject with at least 1 reagent, which distinguishes between methylated and non-methylated cgd dinucleotides within the target nucleic acid. ABZ09861 to ABZ1118 crepresent specifically claimed nucleotide sequences from the present invention. Oligonucleotides from the present invention and be used: for differentiating between healthy haematopoietic cells and proliferative disorder haematopoietic cells, for differentiating between acute of decraming the cytosine methylation state and/or single nucleotide polymorphisms (SNPs) of haematopoietic cell proliferation disorder related DNA sequences and their complements; and as primers for the amplification of haematopoietic cell proliferation disorder related DNA sequences. The nucleotide sequences from the present invention can also be used for detecting a predisposition to, differentiation disorder related DNA sequences. The nucleotide sequences from the present invention can also be used for detecting a predisposition to, differentiation between subclasses, diagnosis, prognosis, treatment and/or monitoring of haematopoietic cell proliferative disorders. The present method enables a highly specific classification of haematopoietic cell proliferative disorders. The present method enables highly specific classification of haematopoietic cell proliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Detecting and differentiating between hematopoietic cell proliferative disorders, comprises contacting a target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides.
859
                                                                                                                          620 TITATNNAAANAAAAAAAANANTIGNITAAAATITINAAATITITITITITITINATAAAA 679
                                                                                                                                                                                                                                                                                                                                                                                              Pelet C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  740 TANAAAANNTITAAATITITINNNITITITAAAAATINANTATANAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAAATITAAAATITAAAATITAAAATITAAATITAAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAAATITAAATITAAATITAAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAAATITAAATITAAAATITAAAATITAAATITAAATITAAAATITAAATITAAATITAAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAAATITAAATITAAATITAAATITAAATITAAAATITAAATITAAATITAAAATITAAATITAAAATITAAATITAAATITAAATITAAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAAATITAAATITAAATITAAATITAAATITAAATITAAAATITAAATITAAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAAATITAAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAAATITAAATITAAATITAAATITAAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAATITAATITAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAAATITAATITAATITAATITAAATITAATITAATITAAATITAATITAATITAATITAATITAAATITAATITAATITAATITAATITAATITAATITAAT
800 TGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTCAAATGAGGCATTTTTAATTGTTA
                                                                                                                                                                                                                                                                   proliferation disorder related DNA sequence #386.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                920 ATAGCTACATCCTATTATTCCCTTTTAGAAACAAGAATAACAATAACAATAAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human, haematopoietic cell proliferation disorder; cytostatic; gene therapy, lymphocytic leukaemia; acute myelogenous leukaemia; cytosine methylation state; gene; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mueller J;
e R, Leu E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Guetig D, Howe A, Mueller J;
P, Grabs G, Lesche R, Leu E;
Model F, Mueller V, Otto T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 28; SEQ ID NO 386; 117pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Piepenbrock C, Adorjan
Lipscher E, Maier S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Distler J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAR-2002; 2002WO-EP003401.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-MAR-2001; 2001US-0278333P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABZ10246 standard; DNA; 8056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lipscher E, 1
Ziebarth H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-018942/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Haematopoietic cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Braun A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200277272-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lewin A, Li
Schwope I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Berlin K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABZ10246;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 olek A,
```

```
neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               completed: April 25, 2004, 08:46:03 ne : 434.176 secs
                                                       WO200200928-A2
                                   sapiens
                                                                                                                                                                                                                                            methylation.
                                                                            03-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         478
                                                                                                                                                                                                                                                                                                                                                                                                             Match
                                                                                                                                                                            olek A,
                                   Ношо
                                                                                                                                                                                                                                                                                                                                                                                                              Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Search
Job tim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . <del>ପ</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                             2089
                                                                                                                                                       2029
                                                                                                                                                                                                                                                                                       1849
                                                                                                                                                                                                                                                                                                                                                                            1729
                                                                                                                                                                                                                                                                                                                                                                                                                        1670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1549 AATTTTAAAAATTTTTTAACATATTTATATTTTATATTTATATTAATATTAATTTA 1490
                                                                                                                                                                                                 1848 iriririririnaaacaaahrirrarirrarraaaraaaraaaraaaraaanaa 1789
                                                                                     497
                                                                                                                                  557
                                                                                                                                                                            614
                                                                                                                                                                                                                        674
                                                                                                                                                                                                                                                                  734
                                                                                                                                                                                                                                                                                                            794
                                                                                                                                                                                                                                                                                                                                                        854
                                                                                                                                                                                                                                                                                                                                                                                                  914
                                                                                                                                                                                                                                                                                                                                                                                                                                            974
                                                                                                          2148 ATTTTATAAAATAAATTATTAAAATTATAAATAATTATAAATAATTAATTATTATTAT
                                                                                                                                                                                                                                                                                                             TATATTTTCTTGGCTTGTTGTATACCCATTGGCCAGGGCCTTTATAAGGACTCCCAAAAG
                                                                                                                                                                                                                                                                                                                                                                             1788 TAATITITTAATITITTAATITTAAAAATITITITTATITITAATITITTAAATATTAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                  TGTTACAATCTATTTGGACGCTCAGGTTATGATATGTTATGAAAAATAAGCTTCATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1669 ATCATATTAAAATAATTTTTTTAATTTTACAATTCATTTATTTCAATTTTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1035 TITCTGATGTTACTAGGTATGGGAAATTAGAACTGGCACAACCCTGACATTACTAAGTGG
                                                                                        438 ACTIATAATTAATGATGATCTGAATAAACATACCGGGATAAAGATGTCAAATGAGTGTGA
                                                                                                                                                                             558 GAAATTACATTTGAGTTGAAGTTTAGAAA---CTAACATAGCATTAATATGAATAATGCA
                                                                                                                                                                                                                                                                   CATTTTGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTCAAATGAGGCATTTTTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                        915 ITCTTATAGCTACATCCTATTATTCCCTTTTAGAAACAAGAATAACAATAAGTTTTAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         975 GTTGCCATACTTAGCATTTATCAGGTCTAATGAAACCAATATTGAATCTCTCTGATAATAT
                                                                                                                                   CTCCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTTCCTAAAATATGATTTTACTGCTT
                                                                                                                                                       Gaps
   disorders allowing for improved and informed treatment of patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                system disease; cytosine methylation; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antiarteriosclerotic, antianaemic, cytostatic, nootropic,
neuroprotective, anti-HIV, anticonvulsant, ophthalmological,
antirkneumatic, antiarthritic, antidiabetic, antisporiatic,
antiinflammatory, cancer, eye disease, arteriosclerosis, anaemia,
acute myeloid leukaemia, Alzheimer's disease, AIDS, epilepsy,
                                                                  4.
                                             Length 8056;
                      Sequence 8056 BP; 3711 A; 0 C; 371 G; 3974 T; 0 U; 0 Other;
                                                                  0; Mismatches 374; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human immune system associated gene SEQ ID NO: 864.
                                           Score 48.8; DB 7;
Pred. No. 0.72;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAATGTTAGGATTTT 1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATAATTAATTATTT 1475
                                            3.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABL32891 standard; DNA; 6131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                 Conservative
                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-MAR-2002
                                                                  297;
                                                                                                                                                                                                                                                                                                             735
                                                                                                                                                                                                                                                                                                                                                         795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1095
                                                                                                                                                                                                                         615
                                                                                                                                                                                                                                                                   675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABL32891,
                                           Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                   855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ន្តដូន
                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                        g
                                                                                                                                  ò
                                                                                                                                                     요
                                                                                                                                                                           ਨੇ
                                                                                                                                                                                               ВÞ
                                                                                                                                                                                                                         ે
                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
```

```
1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCTCTAAAATTTAAAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATT 1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention provides a number of human immune system associated genes which are modified by the methylation of cytosines. The sequences can be used in the diagnosis and treatment of immune system disorders, including eye diseases such as retinopathy, neovascular glaucoma and macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid reheamant, Alzheimer Walsee, Alzheipepsy, neurofibromatosis, rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel diseases. The present sequence is a gene of the invention
                                                                                                                                                                                                                                                                                                                                              Nucleic acid comprising fragment of chemically modified gene, useful for diagnosis and treatment of diseases associated with abnormal cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aa---tarrataraaarraaaarraaarraaaraaaraarararararaaarra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aarrrahrricaaarahaarrihaacrchrechaaraaaaarrearhracaae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGCACAACCCTGACATTACTAAGTGGAAATGTTAGGATTTTTTCGGCATGCTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       888 AIGITIAIGAAAATAAGCIICAITAITICITAIAGCIACAICCIATIAITAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       948 AAACAAGAATAACAATAAGTTTTAATAGTTGCCATACTTAGCATTTATCAGGTCTAATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1008 AACCAATATTGAATCTCTGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGAAGGCCAATATCATACCATTAACTATGAAAGCTTTTAATTCCTAAAAA 1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ٠<u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 6131;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Trcaaraaaatritritriccraraatriarararaacarataricriaaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 6131 BP; 1970 A; 39 C; 1013 G; 3109 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 48.6; DB 6; Length 6 Pred. No. 0.75; 0; Mismatches 179; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       claim 1; SEQ ID NO 864; 32pp + Sequence Listing; German.
                                                                                                                                                                                                               Ϋ,
                                                                                                                                                                                                                      Berlin
                                                            30-JUN-2000; 2000DE-01032529
01-SEP-2000; 2000DE-01043826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.0%;
02-JUL-2001; 2001WO-EP007537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 48.1
nes 169; Conservative
                                                                                                                                                                                                                      ú
                                                                                                                                                             (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                         Piepenbrock
                                                                                                                                                                                                                                                                                     WPI; 2002-130909/17
```

```
April 24, 2004, 23:54:27 ; Search time 4263.17 Seconds (without alignments) 16460.143 Million cell updates/sec
                                                                                                                                                 US-10-051-835-15
1619
1 ttaatctacatatcttatgt.....atttatttaaaaatttaaaa 1619
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                      3470272 seqs, 21671516995 residues
                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                           - nucleic search, using sw model
                                                                                                                                                                                                           IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        em_htgo_other:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   htg_other:'
htg_mus:'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       htgo hum: *
                                                                                                                                                                                                                                                                                                                     Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      em_htg_hum:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            htg_mam:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        fun:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hum:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .:
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gb_om:*
gb_pat:;
gb_ph:*;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .....
07.:.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ä
                                                                                                                                                                                                                                                                                                                                                                                                                            GenEmbl: *
                                                                                                                                                                                                            Scoring table:
                                                                                                                                                  Title:
Perfect score:
                                                           OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                              Database :
                                                                                                                                                                                 Sequence:
                                                                                                                                                                                                                                                           Searched:
                                                                                        Run on:
```

AC124919 Homo sapi 166494 Sequence 14 AC107419 Homo sapi BX005167 Mouse DNA AC128737 Mus muscu HSM805990 5900 bp mRNA linear PRI 17-JUN-2003 Homo sapiens mRNA; cDNA DKFZp686F07114 (from clone DKFZp686F07114); complete cds. BX648571 HOMO SAPI AC066614 HOMO SAPI AK125130 HOMO SAPI AK125130 HOMO SAPI AX332151 SEQUENCE AX33287 SEQUENCE AX33585 SEQUENCE AX3585859 SEQUENCE AX3585859 SEQUENCE AX31087 MUS CUL score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. Description AX083744 (AX083744 (AX069435)AC110014 AE014834) AC105617 AC093899 AE014837 AC120883 ALIGNMENTS SUMMARIES % Query Match Length D 3.9 148075 3.7 253001 3.7 145992 186165 151900 212046 Score 1411. 1410. 1408. LOCUS DEFINITION RESULT 1 HSM805990 80.

Sequence Homo sapi Homo sapi Plasmodiu Homo sapi

Rattus no Plasmodiu

Mus muscu Rattus no

P.falciparu 01 Homo sapi 05 Plasmodiu Plasmodiu Plasmodiu

.falciparu Sequence

Plasmodiu

Dictyoate

Apis mell

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
I (bases I to 5900)
Koehrer, K., Beyer, A., Mewes, H. W., Weil, B., Amid, C., Osanger, A., Fobo, G., Han, M. and Wiemann, S.

BX537884.1 GI:31873891 Homo sapiens (human) Homo sapiens

VERSION KEYWORDS SOURCE ORGANISM

ACCESSION

REFERENCE AUTHORS

is the number of results predicted by chance to have a

Pred. No.

```
GATGCAGTGGACAGGAGGGGGAAATTAGAAAAGAGAAACTATATAAATTGAAAAAGGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1201
                                                                                                                                                                                                                                                                                                                                        4649
                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                              g
                                                                                                                                                                                                   8
                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                              8 8
                                                                                                                                                                                                                                                                                                                                                                     ठे
                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             / Godon geart=1
/ product= "Mayochetical protein"
/ product="Mayochetical protein"
/ product="Mayochetical protein"
/ product="Mayochetical protein"
/ protein_id="CAD97880.1"
/ db xref="d1:13187382"
/ db xref="d1:13187382"
/ db xref="d1:13187382"
/ translation="WRTSLOAVALWGCRAPHSITAIMITDDCRIIVTGGGGGOPCLW
NLSHELKISAKELLEGHSASVTCLARARDFSKOPYVSABAGGGCVWNVTNGGCUK
NLSHELKISAKELLEGHSASVTCBEWLLLTEVSRNGOFPAGGGCVNNVTNGGCUK
ATLPYRHTAICYYTGSERWYCOEVGENLLTEVSRNGOFPAGGGOVIAVNINGCUK
RCCYTERLLLVVFSKCMYVDYCOFSLLLTEVSRNGOFPAGGOSTIANTGENGSPROGUT
RPCYTLESGENGGRITHMIPDPVSKFDGSPREIPVTAFFTLODNFCHDFWGSII
DYFSCLLGGGGGTAVVTSSEYIPSLDKLICGCEDGTIIITQALNAAKARLLEGGSLVG
SPPHYVLKGHQSVTSLLYSPHGLSSKLDOSWNLSGDLOSCVILWDIFFEELHKRFELE
PVENTSLLMSPEKFKLRGEQIICCVGCDBGYNLLHEGKSCLLHARKRILEGGSLVG
SPPHYVLKGHQSVTSLLYSPHGLSSKLDOSWNLSGDLOSCVILWDIFFEELHKRFELE
AGPVTSLLMSPEKFKLRGEQIICCVGCDBGYNLLHEGKSCLLHARKRILEFYRMIKMI
PVENFLIVGCADDSVVIWBIETGTLERHETGBRARIILOCDDPQLVKSVLPIASETL
KHKSIEQRSSSPYCLOFPLEDVOSSSSFYGGEVLRRAKSFYFEKKTLLKKKKTAGGFLSAE
ALAKDITESLAGGDNTIKFSEENDGIIKQKGKISKKOOPKPSRKVDALITAKKKTAFGTANKL
VNMPLELACRVGSSFRMESIHNKMAGANDILNMSSFYSCLRACNSSHVENTLVNKL
VNMPLELACRVGSSFRMESIHNKMAGANDILNMSSFYSCLRACNSSHVENTLVNKL
KLISCRRDQSVQVTEALIQAGAULLAEVQQHMKSLGKIPVNSCHNSHVCHNESHVPRADILSIL
KLISCRRDQSVQVTTRAILQAGAULLAEVQGHMKSLGKIPVNSCHNGNSHVPRADILSIL
KLISCRRDQSVQVTTRAILQAGAULLAEVQGHMKSLGKIPVNSCHNGNSHVPRADILSIL
KLISCRRDQSVQVTTRAILQAGAULLAEVQGHMKSLGKIPVNSCHNGNSHVPRADILSIL
KLISCRRDQSVQVTRAILQAGAULLAEVQGHMKSLGKIPVNSCHNGNSHVPRADISIL
KLISCRRDQSVQVTRAILQAGAULLAEVQGHMKSLGKIPVNSCHARGANGCHNGNSHVPRADISIL
KLISCRRDQSVQVTRAILQAGAULLAEVQGHMKSLGKIPVNSCHARGANGCHNGNSHVPRADISIL
KLISCRRDQSVQVTRAILQAGAULLAEVQGHMKSLGKIPVNSCHARGANGCHNGNSHVPRADISILL
KLISCRRDQSVQVTRAILQAGAULLAEVQGHMKSLGKIPVNSCHARGANGCHNGNSHVPRADISILL
KLISCRRDQSVQVTRAILQAGAULLAEVQGHMKSLGKIPVNSCHARGANGCHNGNSHVPRADISILL
KLISCRRDQSVQVRAILGAGAUNGCHNSCHARGANGCHNGNSHVPRADGAUCHNGNSHVPRADGAUCHNGNSHVPRADGAUCHNGNSHVPRADGAUCHNGNSHVPRADGAUCHNGNSHVPRADGAUCHNGNSHVPRADGAUCHNGNSHVPRADGAUCHNGNSHVPRADGAUCHNGNSHVPRADGAUCHNGNSHVPRADGAUCHNGNSHVPRADGAUCHNGN
Direct Submission

Submitted (17-JUN-2003) MIPS. Ingolstaedter Landstr.1, D-85764
Neuherberg, GERMANY
Clone from S. Wiemann, Molecular Genome Analysis, German Cancer
Research Center (DKEZ): Email s. Wiemann@dkfz-heidelberg.de;
sequenced by BMFZ (Biomedical Research Center at the
Heinrich-Heine-University, Duesseldorf/Germany) within the cDNA
sequencing consortium of the German Genome Project. This clone
(DKFZp686F07114) is available at the RZPD in Berlin. Please contact
the RZPD: Reseaurcenschrum, Heubnerweg 6, 14659
Berlin-Charlottenburg, GERMANY; Email: clon@srzpd.de Purther
information about the clone and the sequencing project is available
at http://mips.gsf.de/proj/CNNA/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTAATCTACATATCTTATGTATATAAATATTGCCTAATCCATAGAAAAAAGGATATAAAG 4348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTCACTICAATTGAAGAAACATATCTCTGAGGAGCAAGCAGCCTCAGGTCCTATGGTGG 4468
                                                                                                                                                                                                                                                                                                                                                                                                           /clone="Mrrz6886F07114"
/tissue type="human fetal kidney"
/clone_lib="686 (synonym: hlcc3). Vector pSport1_Sfi; host
DH10B; sites SfilA + SfilB"
/dev stage="fetal"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . 09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTCACTTCAATTGAAGAAACATATCTCTGAGCATAGGAGCAGCCTCAGGTCCTATGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTAATCTACATATCTTATGTATATATATTGCCTAATCCATAGAAAAAAGGATATAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 87.5%; Score 1417.4; DB 9; Length 5900; Best Local Similarity 96.1%; Pred. No. 1.3e-262; Matches 1556; Conservative 0; Mismatches 50; Indels 13;
                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/map="15q21.3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         os67. .5872
/gene="DKFZp686F07114"
5882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'gene="DKFZp686F07114"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /gene="DKFZp686F07114"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /gene="DKFZp686F07114"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HHSWIAKVCPCKVS"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene
                                                                                                                                                                                                                                                                                               FEATURES
                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઇ
```

5185 5424 4648 4708 4888 4947 5007 5065 5125 5244 4768 4828 099 720 840 006 540 360 420 480 AAACAITCCTGTIAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATA ATATGAATAAT-CATGGAAAATTATTATCCTTTGAAAACTGATTGATAAATATATTCCCC 5305 rerergaraaararrergargiracragerargeaaarragaaarragaacaagacaaga ACATTACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTT AAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATA TCATACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCA GTTAGGCGATGGATTATATTTTCTTGGCTTGTTGTATACCCATTGGCCAGGGCCTTTATA so66 Addacreccaaaagearrirgaagaardgeaarareaaaraagrerargrecrercaaar GAGGCATTTTTAATTGTTAAATCTATTTGGACGCTCAGGTTATGATATGTTATGAAAA 961 AATAAGTTTTAATAGTTGCCATACTTAGCATTTATCAGGTCTAATGAAACCAATATTGAA TCTCTGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTG 541 ATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTA GAGGCATTTTTAATTGTTACAATCTATTTGGACGCTCAGGTTATGATATGTTTATGAAAA 1589 AAGTCACTTCAATTAAAGAAACATTTTTGAGCATGGGACCAGGCTCAGGTCTTAATGCTGG GATGCAGTAGACAGGAGATGGGGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTG 4709 GGCTGCACCCTTAAGGAACTTATAATTAATGATGATCTGAATAAACATACAGGATAAAG ATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAA 4769 ATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGGCATTCTTTGTTTCCTAAA 781 AGGACTCCCAAAAGCATTTTGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTCAAAT 241 ATAAAGCATTAAATATATGATATATAGCTATATCTATGTATCTAACAGAGAAGTTC 301 AAGTCACTTCAATTAAAGAAACATTTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGG 361 GATGCAGTAGACAGGAGATGGGGGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTG GGCTGCACCCTTAAGGAACTTATAATTAATGATCTGAATAAACATACCAGGATAAAG

g g δ g ઠ g

ò

g

ठे

g ò

```
16555 ATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTA 16496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16615 AIGTCAAATGAGIGIGACICCCTIAAAGIAGAITAAAGIGIGCAITCITIGITICCIAAA 16556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17095 TTAATCTACATATCTTATGTATATAATTTGCCTAATCCATAGAAAAAGGATATAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTCACTTCAATTGAAGAAACATATCTCTGAGCATAGGAGCAGCCTCAGGTCCTATGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 AAGTCACTTCAATTAAAGAAACATTTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361 GATGCAGTAGACAGGAGATGGGGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421 GGCTGCACCCTTAAGGAACTTATAATTAATGATGATCTGAATAAACATACCAGGATAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541 ATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTAATCTACATATCTTATGTATATAAATATTGCCTAATCCATAGAAAAAGGATATAAAGGITATAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181 GATGCAGTGGACAGGAGAGAGGGAAATTAGAAAAGAGAACTATATAATTGAAAAAGGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    87.4%; Score 1415; DB 9; Length 157042;
96.2%; Pred. No. 2e-262;
tive 0; Mismatches 49; Indels 13; Gaps
                                                                                                              /clone_lib="RPCI Human BAC library 11"
/clone_"This clone overlaps RPI1-80G8 AC066614 and
rptl-348P16 AC066611. Data from overlapping BACs wer
combined and the consensus sequence determined from
RPI1-232J12 to the extent possible."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'note="overlap with RP11-348P16 AC066611."
                                                                                                                                                                                                                           . .26818
note="overlap with RP11-80G8 AC066614"
                                                                                                                                                                                                                                                                                                                                                                        /noce="low quality data."
42795. 42800
/noce="low quality data."
63513. 63514
/noce="low quality data."
                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="low quality data."
124490. .124492
/note="low quality data."
/note="low quality data."
                                                                                                                                                                                                                                                                                      'note="low quality data."
               mol_type="genomic_DN
db_xref="taxon:9606"
                                                                             map="15q21.3"
clone="RP11-232J12"
                                                                                                                                                                                                                                                                                                               1605. .31610
note="low quality
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 96.2
Matches 1553; Conservative
                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                        unsure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       unsure
                                                                                                                                                                                                                                                                                                                 unsure
                                                                                                                                                                                                                                                                                                                                                          unsure
                                                                                                                                                                                                                                                                                                                                                                                                   unsure
                                                                                                                                                                                                                                                                                                                                                                                                                                            unsure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ရူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                             6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Techanical to 157042)

Rowen, L., Madan, A., Qin, S., Abbasi, N., Baradarani, L., Birditt, B., Bloom, S., Dors, M., Dickhoff, R., Fleetwood, P., Harrison, G., Janes, R., Kaur, A., Madan, A., Owen, M.P., Ratcliffe, A., Shaffer, T. and Hood, L.

Direct Submission

Submitted (22 FEB-2000) Multimegabase Sequencing Center, University of Washington, Po Box 357730, Seattle, WA 98195, USA

Rowen, L., Madan, A., Qin, S., Baradarani, L., Birditt, B., Bloom, S., Burke, J., Dorse, M., Pleetwood, P., Kaur, A., Madan, A., Nesbitt, R., Pate, D. and Hood, L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRI 10-JUL-2001
                                                          1380
                                                                                                   5662
                                                                                                                                              1440
                                                                                                                                                                                     5721
                  5603
                                                                                                                                                                                                                                TAACCACTTGGTACTACACCCAGAAACTCAAAATTGTCTTTTCTCCTGATGAGATATGGG 1500
                                                                                                                                                                                                                                                      5722 TAACCACTIGGIACTACACCCAGAAACTCAAAATIGIC-TITCTCCTGAIGAGATAI-GG 5779
                                                                                                                                                                                                                                                                                                                    1501 GIGTCCTTTTGTACGTCTAGGGCCTAGGGTACCCAAGTGAAGTGAATATATAAGCAAAAT 1560
                                                                                                                                                                                                                                                                                                                                                        5780 greccirirgiacercraesce---raesraaccaeresegreariarraraec-aaar 5835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Direct Submission
Submitted (10-JUL-2001) Multimegabase Sequencing Center, Institute
for Systems Biology, 4225 Roosevelt Way NE, Suite 200, Seattle, WA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACO24061 157042 bp DNA linear PRI 10-JUL-2001
Homo sapiens chromosome 15 clone RP11-232J12 map 15q21;3, complete
seguence.
                                                                                                                                                                                                                                                                                                                                                                                                     1561 GIGITIGIAICCAGAGICTICCIGICATIGIAATAAAATTIATTAAAAATTITAAAAA 1619
                                                                                                                                                                                                                                                                                                                                                                                                                                            5836 GIGITIGIAICCAGAGICTICCIGICALIGIAATAAAATITIATIAAAAAAAAAA 5894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryofa, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 157042)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rowen,L., Madan,A., Qin,S., Baradarani,L., Birditt,B., Bloom,S.,
Burke,J., Dors,M., Fleetwood,P., Kaur,A., Madan,A., Nesbitt,R.,
1321 AAAATGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGA
                                                                                                 5604 AAAATGAATTCTTTATATTGACT-GGTGTTCCACATATTTCAGTAATTTCTGTTATGAGA
                                                                                                                                              5663 GCACTIGAAATAGCAAATIG-CCACACAGTIAACTGGATAGACCACGTACGTGGTGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequencing vector: pUC18; L08752
Chemistry: Dye-terminator Big Dye; 90% of reads
Chemistry: Dye-terminator Big Dye; 10% of reads
Assembly program: Phrap; version 0.990399
Note:data AC066614 (Drafting center UWMSC) and AC066611
[Drafting center UWMSC] were added for finishing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98105, USA
On Jul 10, 2001 this sequence version replaced gi:13162487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pate, D. and Hood, L. Sequencing of human chromosome 15 D15S146-D15S117 region Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Genome Center
Center: Multimegabase Sequencing Center
Center of the TWASC
Web site: http://chroma.mbt.washington.edu/msg_www
Contact: leerowen@systemsbiology.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      - Summary Statistics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AC024061.7 GI:14647263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ното варіепв
                                                                                                                                                                                                                                  1441
                                                                                                                                              1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 2
AC024061/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
```

17036

9

120

11;

16916

180

16856

240

300

360

420

480

540

600

```
analysis.
                                                    Ношо
  Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                     PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
MEDLINE
                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                     TITLE
                              GTTAGGCGATGGATTATATTTTCTT-GCTTGTATA-CCAGTTGTCAAGGACATTATA 16319
                                                                                                                                                                                                      16259
                                                                                                                                                                                                                                                            16199
                                                                                                                                                                                                                                                                                                      ATAAGCTTCATTATTT-TTATAGCTACATCCTATTATTCCCTTTTAGAAAACAAGAATAAC 16140
                                                                                                                                                                                                                                                                                                                                                                     16080
                                                                                                                                                                                                                                                                                                                                                                                                                         16020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16019 ACATTACTAAGGAAAATGTTAGGATTTTTTGGGCATCGCATGTTAGAATCTCTAAAATTT 15960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15959 AAACATTCCTGTTAAAATGACTAAGGTTTGCTTTTTATCAATATGAATTCTGAAGGCCAATA 15900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Argeretectaararecaraceaagrenerrareacaaarreacragret-grita 15781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15780 AAAATGAATTCTTTATATTGACT-GGTGTTCCACATATTTCAGTAATTTCTGTTATGAGA 15722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15721 GGACTTGAAATAGCAAATTG-CCACAGTTAACTGGATAGACCACGTACGTGGTGATGA 15663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAACCACTTGGTACTACACCCCAGAAACTCAAAATTGTC-TTTCTCCTGATGAGATAT-GG 15605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15604 GTGTCCTTTTGTACGTCTAGGCC---TAGGTAACCAGTGGAGTGATTATATTAGC-AAAT 15549
                                                                                             16377
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1560
                                                                                                                                                                                                                                                                                                                                          1020
                                                                                                                                                                                                                                                                                                                                                                                               1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCATACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCA 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1261 ATGCTCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCTGGTTTA 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAACCACTTGGTACTACACCCAGAAACTCAAAATTGTCTTTTCTCCTGATGAGATATGGG 1500
                                                                                                                                                                            840
                                                                                                                                                                                                                                900
                                                                   720
                                                                                                                        780
                                                                                                                                                                                                                                                                                       960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GIGITIGIAICCGGAGICTICCIGICATIGIAAIAAAAAITIAITITAAAAATTT 15494
                                                                                    AGGACTCCCAAAAGCATTTTGAAGGATGGCAATATCAAATAAGTGTATGTCCTCTCTCAAAT
                                                                                                                                                                                                                                                                                                                                                      TCTCTGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGTCCTTTTGTACGTCTAGGGCCTAGGGTACCCAAGTGAAGTGAATATATAAGCAAAAT
                                                                    GTTAGGCGATGGATTATATTTTCTTGGCTTGTTGTATACCCATTGGCCAGGGCCTTTATA
                                                                                                                                                                             AGGACTCCCAAAAGCATTTTGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTCTCAAAT
                                                                                                                                                                                                                                 GAGGCATTTTTAATTGTTACAATCTATTTGGACGCTCAGGTTATGATATGTTTATGAAAA
                                                                                                                                                                                                                                                          GAGGCATTTTTAATTGTTAAATCTATTTGGACGCTCAGGTTATGATATGTTTATGAAAA
                                                                                                                                                                                                                                                                                                                                          AATAAGTTTTAATAGTTGCCATACTTAGCATTTATCAGGTCTAATGAAACCAATATTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                        retergaraanatritergargriaeragerarggaaarragaaerggeeaeaeerg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAACATTCCTGTTAAATGACTAAGGTTTTGCTTTTATCAATATGAATTCTGAAGGCCAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAATGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATAAGCTTCATTATTATTAGCTACATCCTATTATTCCCTTTTAGAAACAAGAATAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACATTACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTT
                                                                   661
                                                                                                                                                                                                      16318
                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                                               1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1501
                                                                                                                                                                                                                                                            16258
                                                                                                                                                                                                                                                                                                                16198
                                                                                                                                                                                                                                                                                                                                                                     16139
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15548
                601
                                                                                             16436
                                                                                                                       721
                                                                                                                                                 16376
                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                         16079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       쉱
                                     원
                                                                                      ద
                                                                                                                       8 8
                                                                                                                                                                          8 B 8
                                                                                                                                                                                                                                                    <u>ਬ</u>੍
                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                          DP
                                                                                                                                                                                                                                                                                                                                         \delta
                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                              ò
```

PRI 16-SEP-2003

linear

mRNA.

2150 bp

BC058026

RESULT 3 BC058026 LOCUS

```
Mammalia; Ettheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 2150)

Straubberg, R.L., Feingold, E.A., Grouse, L., Shenmen, C.M., Schuler, G. Klausner, R.D., Colline, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D., Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., Jorddan, H., Moore, T., Max, S.I., Wang, U., Haieh, F., Diatchenko, L., Marusina, K. Farmer, A.A., Rubin, G.M., Hong, L., Staplecon, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L., Scheefer, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S., Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J., Abramson, R.D., Mullek, J.A., Gunaratne, P.H., Richards, S., Malek, J.A., Gunaratne, P.H., Richards, S.W., Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Villalon, D.K., Mizny, D.M., Sodergren, B.J., Lu, X., Gibbs, R.A., Sanchez, A., Whiting, M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y., Butterfield, Y.S., Krzywinski, M.I., Skalaka, U., Schmutz, J., Myers, R.W., Butterfield, Y.S., Krzywinski, M.I., Skalaka, U., Smailus, D.E., Schnert, A., Schein, J.E., Janalysis of more than 15,000 full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    found
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaithersburg, Maryland;

Gaithersburg, Maryland;

Web site: http://www.nisc.nih.gov/
Chotact: nisc_mgocnhgi.nih.gov

Akhter,N., Ayele,K., Beckstrom-Sternberg,S.M., Benjamin,B.,

Blakesley,R.W., Bouffard,G.G., Breen,K., Brinkley,C., Brooks,S.,

Blakesley,R.W., Garante,S., Guda,X., Haphighi,P.,

Hansen,N., Ho,S.-L., Karlins,B., Kwong,P., Laric,P., Legaspi,R.,

Maduro,Q.L., Masiello,C., Maskeri,B., Mastrian,S.D., McCloskey,J.C.

Tsurgeen,C., Vogt,J.L., Walker,M.A., Wetherby,K.D., Wiggins,L.,

Young,A., Zhang,L.-H. and Green,E.D.
                                                                                                                                                                                                                     Craniata, Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Clone distribution: MGC clone distribution information can be for through the 1 M.A.G.E. Consortium/Lina at: http://image.llnl.gov Series: IRAL Plate: 48 Row: d Column: 11 This clone was selected for full length sequencing because it passed the following selection criteria: Hexamer frequency ORF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDNA Library Preparation: CLONTECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (Linl) DNA Sequencing by: National Institutes of Health Intramural Sequencing Center (NISC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
sapiens cDNA clone IMAGE:4608833, partial cds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Entla: (gapbs-r@mail.nih.gov
Tissue Procurement: CLONTECH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE=460883"
/tissue type="kidney"
/clone_lib="NIH_MGC_75"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .2150
/organism="Homo sapiens'
                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                       BC058026.1 GI:34785600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (bases 1 to 2150)
                                                                                                                                                      sapiens (human)
```

ORIGIN

g ò d ઠ ρp ઠે QQ ò g 8 g

셤 ઠે

```
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

1. (Basea 1 to 5292)
Cottemaelder, B., Obermaier, B., Deutschenbaur, S., Mewes, H.W.,
Weil, B., Amid, C., Osanger, A., Fobo, G., Han, M. and Wiemann, S.
Weil, B., Amid, C., Osanger, A., Fobo, G., Han, M. and Wiemann, S.
Weil, B., Amid, C., Osanger, A., Fobo, G., Han, M. and Wiemann, S.
Weil, B., Amid, C., Osanger, A., Fobo, G., Han, M. and Wiemann, S.
Weil, B., Amid, C., Osanger, A., Fobo, G., Han, M. and Wiemann, S.
Weil, B., Amid, C., Osanger, A., Fobo, G., Han, M. and Wiemann, S.
Neuberberg, GERWANY
Clone from S. Wiemann, Molecular Genome Analysis, German Cancer
Research Center (DKFZ); Email s.wiemann@dkfz-heidelberg.de;
sequenced by Medidenomix, (Martinaried/Germany) within the CDNA
sequencing consortium of the German Genome Project. This clone
(DKFZp686I10117) is available at the RZPD in Berlin. Please contact
the RZPD: Ressourcenzentrum, Heubnerweg 6, 14659
Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de Further
information about the clone and the sequencing project is available
at http://mips.gff.de/proj/cDNA/.
1.5292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HSM808902 5292 bp mRNA linear PRI 30-AUG-2003
HOMO Sapiens mRNA; CDNA DKFZp686L10117 (from clone DKFZp686L10117).
BX648751
BX648751.1 GI:34367915
                                                                                                                       1140
                                                                                                                                                                                       1200
                                                                                                                                                                                                                                                                                                                           1320
                                                                                                                                                                                                                                                                                                                                                            1836
                                                                                                                                                                                                                                                                                                                                                                                                                            1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAACCACTTGGTACTACACCCAGAAACTCAAAATTGTCTTTTCTCCTGATGAGATATGGG 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1896 GGACTTGAAATAGCAAATTG-CCACACAGTTAACTGGATAGACCACGTACGTGGTGATAGA 1954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1777
                   1537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2127
1598 ACATTACTAAGTGGAAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTT
                                                                                                                                                                                                           1837 AAAATGAATTCTTTATATTGACT-GGTGTTCCACATATTTCAGTAATTTCTGTTATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTCTGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTG
                                                                         ACATTACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTT
                                                                                                                                                                                       1141 AAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATA
                                                                                                                                                                                                                                                        TCATACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCA
                                                                                                                                                                                                                                                                                                                             ATGCTCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCTGGTTTA
                                                                                                                                                                                                                                                                                                                                                                                            1321 AAAATGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                                                                               1778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2069
                                                                                                                                                                                                                                                            1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1501
                                                                                                                                                                                                                                                                                                                               1261
                         1478
                                                         1021
                                                                                                                          1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 4
HSM808902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CONSRIM
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                       8 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                              8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원 장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                     g
                                                                                                                                                                                                                  셤
                                                                                        셤
                                                                                                                          8
                                                                                                                                                                                           ò
                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATAAGCTTCATTATTTT-TTATAGCTACTTCCTATTATTCCCTTTTAGAAACAAGAATAAC 1477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  961 AATAAGTTTTAATAGTTGCCATACTTAGCATTTATCAGGTCTAATGAAACCAATATTGAA 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1062 ATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGTATTA 1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCTGCACCCTTAAGGAACTTATAATTAATGATCTGAATAAACATAACATACCAGGATAAAG 1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1002 ATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAA 1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCTGCACCCTTAAGGAACTTATAATTAATGATGATCTGAATAAACATACCAGGATAAAG 480
                                                                                                            11
                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                 761
                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGTCACTTCAATTAAAGAAACATTTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGCAGTAGACAGGAGATGGGGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTG 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      941
                                                                                                                                                                                                                                              641
                                                                                                                                                                                                                                                                                                  AAGTCACTTCAATTAAAGAACATTTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGG 881
                                                                                                                                                                           581
                                                                                                                                                                                                             TATTAAATATGTGATATATAGCHNNNNNNNNNNNNNNNNNNNNNNNATAGGGAAGTTCAA 120
                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATGCAGTAGACAGGAGAGATGGGGGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGACTCCCAAAAGCATTTTGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGGCATTTTTAATTGTTACAATCTATTTGGACGCTCAGGTTATGATATGTTTATGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATAAGCTTCATTATTACTTATAGCTACATCCTATTATTCCCTTTTAGAAACAAGAATAAC
                                                                                                                                                                                                                                                                                                                                                                        481 ATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CICCITITAGAAACAGICAAAAGCCACTICAAACAAGITICAAAATAAAGGAAGGIAGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GITAGGCGATGGATTATATTTTTTTTGCTTGTTGTATACCCATTGGCCAGGGCCTTTATA
                                                                                                                                                                                                                                              TATTAAATATGTGATATATAGCTATATCTATCTATCTATGTATCTAATAGGGAAGTTCAA
                                                                                                                                                                TTAATCTACATATCTTATGTATATAAATATTGCCTAATCCATAGAAAAAAGGATATAAAG
                                                                                                                                                                                                                                                                                GTCACTTCAATTGAAGAAACATATCTCTGAGCATAGGAGCAGCCTCAAGGTCCTATGGTGG
                                                                                                                                                                                                                                                                                                                                                  GATGCAGTGGACAGGAGAGGGGAAATTAGAAAAGAGAACTATATAAATTGAAAAAGGGAT
                                                                                                                                            TTAATCTACATATCTTATGTATATAATATTGCCTAATCCATAGAAAAAAGGATATAAAG
                                                                                                          13; Gaps
                                                                           Length
                                                                         87.4%; Score 1414.2; DB 9; Length ilarity 96.0%; Pred. No. 6.6e-262; Conservative 0; Mismatches 52; Indels
          /lab_host="DH10B"
/note="Vector: pDNR-LIB"
                                                                                             Similarity
                                                                                             Best Local Simi
Matches 1554;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          942
                                                                                                                                              Н
                                                                                                                                                                                                                                                                                                                  642
                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                   702
                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                    762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                               582
                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                522
                                                                               Query
```

g

g ઠે

6 6 6 6 6 6

8 8 8

8 8

g

ઠે

ò

```
/organism="Homo sapiens"
/wol_type="mRNA"

wol_type="mRNA"

db_xref="taxon:9606"
/map="15g21.3"
/clone="DKFZp686L10117"
/clone="DKFZp686L10117"
/clone lib="ke66 (synonym: hlcc3). Vector pSport1_Sfi; host DH108; sites SfilA + SfilB"

bH108; sites SfilA + SfilB"

cap dev stage="fetal"

5248.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4090 GGCTGCACCCTTAAGGAACTTATAATTAATGATGATGATGATGAATAAAACATACCAGGATAAAG 4149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATATGATTTTACTGCTTGAAATTACATTTTGAGTTGAAGTTTAGAAACTAACATTA 4269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4270 ATATGAATAAT-CATGGAAAATTATTATCCTTTGAAAACTGATTGATAAATATATTCCCC 4328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTAGGCGATGGATTATATTTTCTT-GCTTGTATA-CCAGTTGTCAAGGACATTATA 4446
                                                                                                                                                                                                                                         TTAATICTACATATICTTATIGTATATAAATATTGCCTAATCCATAGAAAAAAGGTATAAAG 3729
                                                                                                                                                                                                                                                                          AAGTCACTTCAATTAAAGAAACATTTTTGAGCATGGGACCACCCTCAGGTCTTATGCTGG 4029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGCAGTAGACAGGAGATGGGGAAATTAGAAAAGAGAAACTGTGTAATTGAAATGAAGTG 4089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11;
                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGTCACTTCAATTAAAGAAACATTTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATGCAGTAGACAGGAGATGGGGGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTG 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCTGCACCCTTAAGGAACTTATAATTAATGATGATCTGAATAAACATACCAGGATAAAG 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541 ATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAAACATAGCATTA 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTIAGGCGAIGGAITAIAITITCIIGGCIIGIAIACCCAIIGGCCAGGGCCIIIAIA 780
                                                                                                                                                                                                                          9
                                                                                                                                                                                                                         1 TTAATCTACATATCTTATGTATATAAATATTGCCTAATCCATAGAAAAAGGATATAAAG
                                                                                                                                                                                                                                                                                                                             GTCACTTCAATTGAAGAAACATATCTCTGAGCATAGGAGCAGCCTCCAGGTCCTATGGTGG
                                                                                                                                                                                                                                                                                                                                                                               GATGCAGTGGACAGGAGAGGGGGAAATTAGAAAAGAGAACTATATAATTGAAAAAGGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAA
                                                                                                                                                                                                  Gaps
                                                                                                                                                                      Query Match 87.3%; Score 1412.6; DB 9; Length 5292; Best Local Similarity 95.9%; Pred. No. 1.1e-261; Matches 1553; Conservative 0; Mismatches 53; Indels 13;
                                                                                                                      polyA_signal
polyA_site
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4447
                                                                                                                                                                                                                                                   3670
                                                                                                                                                                                                                                                                                                      3730
                                                                                                                                                                                                                                                                                                                                                       3790
                                                                                                                                                                                                                                                                                                                                                                                                       3850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4030
                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         음
상
음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                      8 S
                                                                                                                                                                                                                                                                                                                                                                           6 B 6 B 6 B 6 B 6
                                                                                                                                                                                                                                                                            \stackrel{>}{\circ}
                                                                                                                                                                                                                                                                                                g
```

Oy 8450	41 GAGGCATTTTAATTGTACAATCTATTTGACGCTCAGGTTATGATATGTTATGAAA 900
Db 456	
Qy 96 Db 462	51 AATAAGTITTAATAGTIGCCATACTTAGCATTTATCAGGTCTAATGAAACCAATATTGAA 1020
Oy 102	21 TCTCTGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTG 1080
Oy 108 Db 474	81 ACATTACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCAGGTTAGAATCTCTAAAATTT 1140
Oy 114 Db 480	141 AAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATA 1200
Oy 12(201 TCATACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTGTTTTAGAGATATTCAAGCA 1260
Oy 126 Db 495	61 AIGCICICCTAAITAICCAIAGGCAAGIGIGITITAIGACACAAAITCACTAGICIGGITITA 1320
Oy 133	21 AAAATGAAATCTTTATATTGACTGGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGA 1380
Oy 133	81 GGACTIGAAATAGCAAATIGCCCACACAGTTAACTGGATAGATCACGTACGTGGTGATCA 1440
Oy 144.	41 TAACCACTIGGIACIACACCCAGAAACICAAAAITGICITITCICCIGAIGAGAIAIGGG 1500
Qy 15	501 GTGTCCTTTTGTACGTCTAGGGCCTAGGGTACCCAAGTGAAGTGAATATATAAGCAAAAT 1560
Oy 15. Db 52:	61
RESULT 5 HSM808720 LOCUS DEFINITION ACCESION VERSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS CONSRITM TITLE JOURNAL COMMENT	HSW808720 HSW808720 HSW808720 HSW808712 HSW808712 HSW808712 HSW808712 HSW808713 HSW808713 HSW808713 HSW808713 HSW808713 HSW808713 HSW808713 HSW808703 HSW8

```
1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1440
                                                  5265
                                                                                                      5325
                                                                                                                                                            5385
                                                                                                                                                                                                                5444
                                                                                                                                                                                                                                           1020
                                                                                                                                                                                                                                                                                                                           5564
                                                                                                                                                                                                                                                                                                                                                                                                           1200
                                                                                                                                                                                                                                                                                                                                                                                                                                     5684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-MAR-2002
complete
5207
                                                                            840
                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5685 TCATACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTTAGAGATATTCAAGCA
                                                                                                                                                                                                                                                                                                                 AAAATGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5863 GGACTIGAAATAGCAAATIG-CCACACAGTTAACTGGATAGACCACGTACGTGGTGAICA
                                                                                                                                                                                                                                                           5922 TAACCACTIGGTACTACACCCAGAAACTCAAAATTGTC-TTTCTCCTGATGAGATAT-GG
AGGACTCCCAAAAGCATTTTGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTCAAAT
                                                                                           GAGGCATTTTTAATTGTTACAATCTATTTGGACGCTCAGGTTATGATATGTTTATGAAAA
                                                                                                                                                  5326 GAGGCAFITITAATFGTIAAAACTATTIGGAGGCTCAGGTFATGATGTTTTATGAAAA
                                                                                                                                                                                      ATAAGCTTCATTATTTCTTATAGCTACATCCTATTATTCCCTTTTAGAAACAAGAATAAC
                                                                                                                                                                                                      AATAAGTTTTAATAGTTGCCATACTTAGCATTTATCAGGTCTAATGAAACCAATATTGAA
                                                                                                                                                                                                                                                                                                TCTCTGATAAATATTTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTG
                                                                                                                                                                                                                                                                                                                                                       ACATTACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTT
                                                                                                                                                                                                                                                                                                                                                                    ACATTACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                           AAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATA
                                                                                                                                                                                                                                                                                                                                                                                                                            AAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGCCAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCATACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCTGGTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGACTTGAAATAGCAAATTGCCCACACAGTTAACTGGATAGATCACGTAGGTGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAACCACTTGGTACTACACCCGGAAACTCAAAATTGTCTTTTCTCCTGATGAGATATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGTCCTTTTGTACGTCTAGGCC---TAGGTAACCAGTGGAGTGATTATATTAGC-AAAT
                           GTTAGGCGATGGATTATATTTTCTTGGCTTGTTGTATACCCCATTGGCCAGGGCCTTTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GIGITIGIATCCAGAGTCTTCCTGTCATTGTAATAAAAATTTATTAAAAATTTAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          176626 bp DNA linear PRI chromosome 15 clone RP11-80G8 map 15g21.3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GI:19310269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AC066614
Homo sapiens c
sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AC066614
AC066614.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo i
                                                                                                         5266
                                                                                                                                                                                         901
                                                                                                                                                                                                                   5386
                                                                                                                                                                                                                                              196
                                                                                                                                                                                                                                                                          5445
                                                                                                                                                                                                                                                                                                                                                        1081
                                                                                                                                                                                                                                                                                                                                                                                  5565
                                                                                                                                                                                                                                                                                                                                                                                                              1141
                                                                                                                                                                                                                                                                                                                                                                                                                                        5625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1561
                                                     5208
                                                                               781
                                                                                                                                      841
                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1501
                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AC066614/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                  g
                                                                                                                                   8 8
                                                                                                                                                                                  8 &
                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                              B &
                                                                                                                                                                                                                                                                                                                                                                                                     9
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            $ 8 $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 8
                                                     셤
                                                                     8
                                                                                                                                                                                                                                   ℰ
                           ઠ
                                                                                                                   /organism="Homo sapiens"
/organism="Homo sapiens"
/mol_type="haxn:9606"
/map="15q21.3"
/clone="DKF9686M05115"
/clone="DKF9686M05115"
/clone="Ib="6686 (synonym: hlcc3). Vector pSport1_Sfi; host DH10B; sites SfilA + SfilB"
/dev_stage="fetal"
/dev_stage="fetal"
6082
sequenced by GBF (National Research Centre for Biotechnology Ltd., Braunschweig/Germany) within the cDNA sequencing consortium of the German Genome Project.

This clone DKPZp686M05115) is available at the RZPD in Berlin. Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 14059 Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de Further information about the clone and the sequencing project is available at http://mips.ggf.de/proj/cDNA/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5147
                                                                                                                                                                                                                                                                                                                                                                                                                                                   4608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGTCACTTCAATTAAAGAAACATTTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGG 4848
                                                                                                                                                                                                                                                                                                                                                                                      TTAATICTACATATICTTATGTATATAAATATTGCCTAATCCATAGAAAAAAGGATATAAAG 4548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGCACTGGACAGGAGAGGGGGAAATTAGAAAAGAGAAACTATATAATTGAAAAAAGGGAT 4728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1849 GATGCAGTAGACAGGAGATGGGGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTG 4908
                                                                                                                                                                                                                                                                                                                                              ij
                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCTGCACCCTTAAGGAACTTATAATTAATGATCTGAATAAACATACCAGGATAAAG 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGTCACTTCAATTAAAGAAACATTTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGG 360
                                                                                                                                                                                                                                                                                                                                                                      09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTGCACCTTAAGGAACTTATAATTAATGATGATCTGAATAAACATACAGGATAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATGCAGTGGACAGGAGAGGGGAAATTAGAAAAGAGAAACTATATAATTGAAAAAGGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGCAGTAGACAGGAGATGGGGGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGTATTA
                                                                                                                                                                                                                                                                                                                                                                                                                            GTCACTTCAATTGAAGAACATATCTCTGAGCATAGGAGCAGCCTCAGGTCCTATGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5089 ATATGAATAAT-CATGGAAAATTATTATCCTTTGAAAACTGATTGATAAATATATTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                            TATTAAATATGTGATATATAGCTATATCTATCTATCTATGTATCTAATAGGGAAGTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTAATCTACATATCTTATGTATATAATATGCCTAATCCATAGAAAAAAGGATATAAAG
                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                           53; Indels 13;
                                                                                                                                                                                                                                                                                                                 Length 6104;
                                                                                                                                                                                                                                                                                                                 Score 1412.6; DB 9;
Pred. No. 1.1e-261;
0; Mismatches 53; I
                                                                                                                                                                                                                                                                                                                  87.3%;
95.9%;
                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 95.9
Matches 1553; Conservative
                                                                                                                                                                                                                                                          polyA_signal
polyA_site
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                      4549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                  4489
                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                           FEATURES
```

원 . &

g δ g õ

8 8

a ð Dp Dp δ g Š 중 음

g ò g

d

δ

ò

```
GTCACTTCAATTGAAGAAACATATCTCTGAGCATAGGAGCAGCCTCAGGTCCTATGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                            166786
                                                                             181
                                                                                                          166726
                                                                                                                                            241
                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                     421
               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ନ୍ଧ
                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        С
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                      음
                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                 ठें
                                         g
                                                                           ò
                                                                                                    셤
                                                                                                                                       Š
                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                              Center: Multimegabase Sequencing Center
Center code: UWMSC
Web site: http://chroma.mbt.washington.edu/msg_www
Web site: http://chroma.mbt.washington.edu/msg_www
Contact: leerrowenGasystemsbiology.org
Contact: leerrowenGasystemsbiology.org
Sequencing vector: pUG18; L08752
Sequencing vector: pUG18; L08752
Chemistry: Dye-terminator Big Dye; 90% of reads
Chemistry: Dye-terminator Big Dye; 10% of reads
Assembly program: Phrap; version 0.990399
NOCE:data from overlapping clones AC087832 [drafting centers
WIBN,UWMSC],AC036598 [drafting center WIBR],and AC024061 drafting
center UWMSC] were added for finishing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             166847
                                                                                                                                                                                                      Direct Submission

Direct Submission

Submitted (25-APR-2000) Multimegabase Sequencing Center, University of Nashington, Po Box 357730, Seattle, WA 98195, USA

(bases 1 to 176626)

(bases 1 to 176626)

Burke, J., Madan, A., Qin, S., Baradarani, L., Birditt, B., Bloom, S., Burke, J., Dors, M., Fleetwood, P., Kaur, A., Madan, A., Nesbitt, R., Pate, D. and Hood, L.
                                                                                                                                                                                                                                                                                                                                   Submitted (09-MAR-2002) Multimegabase Sequencing Center, Institute for Systems Biology, 4225 Roosevelt Way NE, Suite 200, Seattle, WA 98105; USA On Mar 9, 2002 this sequence version replaced gi:13702797.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone_irril-80G8"
/clone_lib="RPCI human BAC library 11"
/note="This BAC overlaps RP11-6417 AC087832, RP11-418B13
AC026598, and RP11-232J12 AC024061.Data from overlapping
BACS were combined and the consensus sequence determined
from RP11-80G8 to the extent possible."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
Craniata, Vertebrata, Euteleostomi,
Catarrhini, Hominidae, Homo.
                                                                                                                                            Birditt, B.,
                                                                                                                                        Rowen, L., Madan, A., Qin, S., Abbasi, N., Baradarani, L., Birditt, B. Bloom, S., Dors, M., Dickhoff, R., Fleetwood, P., Harrison, G., James, R., Kaur, A., Madan, A., Owen, M.P., Ratcliffe, A., Shaffer, T.
                              1 (bases 1 to 176626)
Rowen,L., Madan,A., Qin,S., Baradarani,L., Birditt,B., Bloom,S.,
Burke,J., Dors,M., Fleetwood,P., Kaur,A., Madan,A., Nesbitt,R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       166906 TIPATICTACATATCTTATGTATATATATATTTGCCTAATCCATAGAAAAAAGGATATAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTAATCTACATATCTTATGTATATAAATATTGCCTAATCCATAGAAAAAGGATATAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oĘ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 176626;
                                                                             Pate, D. and Hood, L.
Sequencing of human chromosome 15 D15S146-D15S117 region
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="overlap with RP11-232J12 AC024061."
156093
/note="removed TN10 insertion from some clones RP11-80G8."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'note="overlap with RP11-418B13 AC026598.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1411.8; DB 9;
Pred. No. 8.3e-262;
0; Mismatches 51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
| Organism="genomic DNA"
| Abb_aref="taxon:9606"
| Chromosome="15"
| map="15q21.3"
Chordata;
                  Primates;
                                                                                                                                                                                                                                                                                                                                                                                                      ---- Genome Center
                                                                                                                            (bases 1 to 176626)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 87.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          . .141109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity 96.0
                                                                                                                                                                                                                                                                                                                       Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Sim
Matches 1551;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                         TITLE
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ્ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
```

```
166367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         166248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             166187 GTTAGGCGATGGATTATTTTTTTT-GCTTGTTATA-CCAGTTGTCAAGGACATTATA 166130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            166070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       166010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         165831
                                                                                                                                                                  166607
                                                                                                                                                                                                                                               166547
                                                                                                                                                                                                                                                                                                                         166487
                                                                                                                                                                                                                                                                                                                                                                                                      166427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              166307
                                                                                       166667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 165951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      165773
              166727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              165893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1140
                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              960
                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         009
                                                   240
                                                                                                                                                                                                                                                                                    420
                                                                                                                                                     166426 ATGTCAAATGAGTGTGACTCCCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          166306 ATATGAATAAT-CATGGAAAATTATTATCCTTTGAAAACTGATJGATAAATATATTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         166129 AGGACTCCCAAAAGCATTTTGAAGGATGGCAATATCAAATAAGTGTATGTCCTCTCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            166009 ATAAGCTTCATTATTT-TTATAGCTACATCCTATTATTCCCTTTTAGAAACAAGAATAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1141 AAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATA
GTCACTTCAATTGAAGAAACATATCTCTGAGCATAGGAGCAGCCTCAGGTCCTATGGTGG
                                                                                           GATGCAGTGGACAGGAGAGGGGAAATTAGAAAAGAGAACTATATAATTGAAAAAGGGAT
                                                                                                                                                                                                                                166546 GATGCAGTAGACAGGAGATGGGGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              166366 ATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGACTCCCAAAAGCATTTTGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGGCATITITAATITGTTACAATCTATITGGACGCTCAGGTTATGATATGTTATGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATAAGTTTTAATAGTTGCCATACTTAGCATTTATCAGGTCTAATGAAACCAATATTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTCTGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAAACCCTG
                                                                                                                              AAGTCACTTCAATTAAAGAACATTTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGG
                                                                                                                                                                                                                                                                                    GATGCAGTAGACAGGAGATGGGGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTG
                                                                                                                                                                                                                                                                                                                                                                 GGCTGCACCCTTAAGGAACTTATAATTAATGATCTGAATAAACATACAGGATAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTTAGGCGATGGATTATTTTTTTTTGGCTTGTTATACCCATTGGCCAGGGCCTTTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACATTACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541 ATATGATTTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATGCAGTGGACAGGAGGGGGAAATTAGAAAAGAGAACTATATAATTGAAAAAGGGAT
```

a &

/Clome_lib="NTRRIZ" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRRiz" // Clome_lib="NTRriz" // Clome_lib="NTRriz" // Clome_lib="NTRriz" // Clome_lib="NTRriz" /	Db 1521 CTCCTTTAGAACAGTATATATTCTTGAGATTTCTAAATAAA
1201 TCARACCATTAACTATCAACACTTTAATTCCTAAAATACTTTAAACACTATAACACA 1260 126710 TCARACCATTAACTATCAACACTTTAATTCCTAAAAATACTTTAAACACATACTCCTTTA 1200 126110 TCARACCATTAACTATCAACACTGTTTAAAAATACTTTAAACATATCCTTAACACTTA 1200 126560 ATGCCTTCCTAAAATCCAACACTGTTATAACACACACACA	Kazusa-Kamatari, Kisarazu, Chiba 292-0818, Japan (E-maligenomiceShrico.)p, Tel:81-2975, Fax:81-438-52-3986) COMMENT NEDO human cDNA sequencing project supported by Ministry of Economy, Trade and Industry of Japan; CDNA full insert sequencing: Research Association for Biotechnology (RAB); cDNA library construction: Helix Research Institute (HRI) (supported by Japan Key Technology Center etc.); 5. £ 3'-end one pass sequencing: RAB; and Biotechnology Center, National Institute of Technology and Evaluation: clone selection for full insert sequencing: RAB; RAB; annotation: HRI and RAB. Location/Qualifiers Location/Qualifiers Location/Qualifiers // Organism="Homo sapiens" // AD xref="Taxon:9666" // Colone="MYZRIZO10283" // Cell_line="MYZRIZO10283" // Cell_Lype="Leratocarcinoma"

셤 à 8 8 8

8 6 $\dot{\delta}$

8 S

g

8 6

d

8

g ઠે g

δ

```
Kazusa-Kamatari, Kisarazu, Chiba 292-0818, Japan

(E-mail:genomics@hri.co.jp, Tel:81-438-52-3975, Fax:81-438-52-3986)

NEDO human cDNA sequencing project supported by Ministry of Economy, Trade and Industry of Japan; cDNA full insert sequencing:

Research Association for Biotechnology (RAB); cDNA library construction: Hellx Research Institute (HRI) (supported by Japan Key Technology Center etc.); 5'- & 3'-end one pass sequencing: RAB, HRI, and Biotechnology Center, National Institute of Technology and Evaluation; clone selection for full insert sequencing: HRI and RAB, nnotation: HRI and RAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /protein_id="BAC86058.1"
//protein_id="BAC86058.1"
//protein_id="BAC86058.1"
//tanslation="WLGWDLONGSATKDVSGVNLFSRKVLDLSDKYTATLPRQVGIP
RGLENNCDSLRESDTIVYLLSRLFLVNKLVNMPLELACRVGSSFRMESIHNKORGAGN
DLINNSSFYSCRNGKNESHYPRADLSLLKCISCWRDGSVGVYTRAICANTALARVQCHM
KSICKLPVNSQPVSRAENGNCEMKONLPKLEWTEELELQCVRNTLPLQTPVSEVVKHDS
NSNSANFQDVEDMFDRCALEESESPGEPRHHSWIAKVCPCKVS"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTAATCTACATATCTTATGTATATATATTGCCTAATCCATAGAAAAAGGATATAAAG 1959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCACTTCAATTGAAGAAACATATCTCTGAGCATAGGAGCAGCCTCAGGTCCTATGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGTCACTTCAATTAAAAGAAACATTTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2260 GATGCAGTAGACAGGAGATGGGGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCTGCACCCTTAAGGAACTTATAATGATGATCTGAATAAACATACCAGGATAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGCCATTCTTTGTTTCCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATTAAATATGTGATATATAGCTATATCTATCTATCTATGTATCTAATAGGGAAGTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCACTTCAATTGAAGAAACATATCTCTGAGCATAGGAGCAGCCTCAGGTCCTATGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2080 GATGCAGTGGACAGGAGAGAGGAAATTAGAAAAGAGAGACTATATAATTGAAAAAGGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATGATTTACTGCTTGAAATTACATTTGAGTTGAAGTTTAGAAACTAACATAGCATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTAATCTACATATCTTATGTATATAAATATTGCCTAAATCCATAGAAAAAAGGATATAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATGCAGTGGACAGGAGGGGGAAATTAGAAAAAGAGAACTATATAAATTGAAAAAGGGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 AAGTCACTTCAATTAAAGAAACATTTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATGCAGTAGACAGGAGATGGGGGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCTGCACCCTTAAGGAACTTATAATTAATGATCTGAATAAACATAACCAGGATAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481 ATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  87.0%; Score 1408.6; DB 9; Length 3493; 96.2%; Pred. No. 7.2e-261; ive 0; Mismatches 48; Indels 13;
                                                                                                                                                                                                                                                                                                                      1.3493
| Companies | Companies | |
| Companies | Companies |
| Companies | Companies |
| Companies | Companies |
| Cione | CTONG3007528 |
| Cione | CTONG3007528 |
| Cione | Cione | Companies |
| Cione | Cione | Companies |
| Cione | Cione | Cione |
| Cione | Cione | Cione |
| Cione | Cione | Cione |
| Cione | Cione | Cione |
| Cione | Cione | Cione |
| Cione | Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cione |
| Cione | Cio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="unnamed protein product"
/codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . .962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 96.2
Matches 1546; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDS
                                                                                                                                                                                                                                                                                                   FEATURES
                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ℰ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    È
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        심
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ठ
                                                                                                                                                           1080
                                                                                                                                                                                                                                                                     1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1500
                                                                                                 1877
                                                                                                                                                                                                                                                                                                                               1997
                                                                                                                                                                                                                                                                                                                                                                                                                                         2057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRI 09-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ninomiya, K., Wagatsuma, M., Kanda, K., Kondo, H., Yokoi, T.,
Kodaira, H., Furuya, T., Takahashi, M., Kikkawa, E., Omura, Y., Abe, K.,
Kamihara, K., Katsuta, N., Sato, K., Tanikawa, M., Yamazaki, M.,
Sugiyama, T., Irie, R., Ottsuki, T., Sato, H., Wakamatsu, A., Ishi, S.,
Yamamoto, J., Isono, Y., Kawai-Ho, Y., Sato, K., Nishikawa, T.,
Kimura, K., Yamashita, H., Matsuo, K., Nakamura, Y., Sekine, M.,
Kikuchi, H., Murakawa, K., Kanehori, K., Takahashi-Fulii, A.,
Oshima, A., Sugiyama, A., Kawakami, B., Suzuki, Y.,
NEDO human cDNA sequencing project
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 (bases 1 to 3493)
Isogai,T. and Yamamoto,J.
Direct Submission
Submitted (15-JUL-2003) Takao Isogai, FLJ Project(HRI Team); 2-6-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                            1878 TCTCTGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTG
                                                                                                                                                                                                                                                                                                   ACATTACTAAGTGGAAATGTTAGGATTTTTTCGGCATCGCATGTTAGAATCTCTAAAATTT
                                                                                                                                                                                                                                                                                                                                                                               AAACAITCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCATACCATTAACTATGAAAGCTTTTAATTCCTAAAATAGTTTTAGAGATATTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGCTCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCT-GTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAACCACTTGGTACTACACCCAGAAACTCAAAATTGTC-TTTCTCCTGATGAGATAT-GG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2353 GIGICCITITIGIACGICIAGGCC---IAGGIAACCAGIGGAGIGAITAIAIAITAGC-AAAI
                                             AATAAGTTTTAATAGTTGCCATACTTAGCATTTATCAGGTCTAATGAAACCAATATTGAA
                                                                                                                                                        TCTCTGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTG
                                                                                                                                                                                                                                                                     ACATTACTAAGTGGAAATGTTAGGATTTTTCGGCATGCTAGAATCTCTAAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                         AAACATTCCTGTTAAATGACTAAGGTTTGCTTTTTATCAATATGAATTCTGAAGGCCAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCATACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGCTCTCCTAATATCCATACGCAAGTGTTTTATGACACAAATTCACTAGTCTGGTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAATGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2236 GGACTTGAAATAGCAAATTG-CCACACAGTTAACTGGATAGACCACGTACGTGGTGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAACCACTTGGTACTACACCCAGAAACTCAAAATTGTCTTTTTCTCCTGATGAGATATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens cDNA FLJ43140 fis, clone CTONG3007528. AK125130 AK125130. GI:34531119 AK125130.1 GI:34531119 Homo sapiens (human) Homo sapiens (human) Homo sapiens (human) Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2177
                                                                                              1818
                                                                                                                                                                                                                                                                                                                            1938
                                                                                                                                                                                                                                                                                                                                                                                                                                   1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2409
                                                                                                                                                        1021
                                                                                                                                                                                                                                                                  1081
                                                                                                                                                                                                                                                                                                                                                                               1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 8
AK125130
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
CETWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
JOURNAL
```

PAT 09-JAN-2002

Euteleostomi;

```
Young, P.E., Augustus, M., Carter, K.C., Ebner, R., Endress, G., Horrigan, S., Soppet, D.R. and Weaver, Z. Cancer gene determination and therapeutic screening using signature gene sets
Patent: WO 0194629-A 2660 13-DEC-2001;
Patent: WO 0194629-A 2660 13-DEC-2001;
Avalon pharmaceuticals (US)
Location/Qualifiers
1. :580
//cranism="Homo sapiens"
//mol_type="unassigned DNA"
//db_xref="taxon:9606"
                                                  Homo sapiens (human)
Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Butele
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
  linear
AX332151 580 bp DNA Sequence 2660 from Patent WO0194629. AX332151 AX332151.1 GI:18122785
                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 95.7%;
Matches 563; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     105
                                                                                                                                                                                                                                                                                                                                                                                             1145
                                                                                                                                                                                                                                                                                                                                                                                                                 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1565
                                                                                                                                                                                                                                                                                                                                               1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                             400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         163
                                                                                                                                                                                                                                                                                                                                                                                                                                        1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               49
                                                                                                                                                                                           source
  LOCUS
DEFINITION
ACCESSION
VERSION
SEYWORDS
SOURCE
ORGANISM
                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                          JOURNAL
                                                                                                                                                                               FEATURES
                                                                                                                                    TITLE
                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                 6 6 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                       3035
                                                                                                                                                                                                                                                                                                                                                                                                                             1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3446
                                                                                                                                                                                                                          2796
                                                                                                                                                                                                                                                                                            1020
                                                                                                                                                                                                                                                                                                                                                     TCTCTGATAAATATTTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCCTG 2975
                                                                                                                                                                                                                                                                                                                                                                                                                                            AAACATICCTGTIAAAIGACIAAGGTITGCTITITATCAAIAIGAATICTGAAGGCCAATA 3095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGTCCTTTTGTACGTCTAGGGCCTAGGGTACCCAAGTGAAGTGAATATATAAGCAAAAT 1560
                                                                                                                                                                                                                                                              ATAAGCTTCATTATTT-TTATAGCTACATCCTATTATTCCCTTTTAGAAACAAGAATAAC 2855
                                                                                                                                                                                                                                                                                                                AATAAGITITIAATAGITIGCCATACITIAGCATTTATCAGGICTAATGAAACCAATATIGAA 2915
                                                                                                                                                                                                                                                                                                                                       TCTCTGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTG 1080
                                                                                                                                                                                                                                                                                                                                                                                  ACATTACTAAGTGGAATGTTAGGATTTTTCGGCATGCTAGGAATCTCTAAAATTT 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCATACCATTAACTATGAAAGCTTTTAATTCCTAAAATAGTTTTAGAGATATTCAAGCA 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGCTCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCTGGTTTA 1320
                                               2558
                                                                                        2618
                                                                                                                                 2499
                                                                                                               780
                                                                                                                                                           840
                                                                                                                                                                                                                                                ATAAGCTTCATTATTTCTTATAGCTACATCCTATTATTCCCTTTTAGAAACAAGAATAAC 960
                                                                    720
                                                                                                                                                                                                    GAGGCATTITIAATTGTTACAATCTATTTGGACGCTCAGGTTATGATATGTTATGAAA 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3156 AIGCTCTCCTAATATCCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCT-GTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3274 GGACTTGAAATAGCAAATTG-CCACACAGTTAACTGGATAGACCACGTACGTGGTGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACATTACTAAGTGGAAATGTTAGGATTTTTCGGCATTGCATGTTAGAATCTCTAAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAATGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAACCACTTGGTACTACACCCAGAAACTCAAAATTGTCTTTTTCTCCTGATGAGATATGGG
                                                                                                                                                                                                                    GAGGCATTTTTAATTGTTAAAATCTATTTGGACGCTCAGGTTATGATATGTTTATGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                             AAACATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATA
                                                                                AATAAGTITIAATAGTIGCCATACTIAGCATTIATCAGGTCTAATGAAACCAATATIGAA
    2440 ATATGATTTTACTGCTTGAAATTACATTTGAGGTTGAAGTTTAGAAACTAACATAGCATTA
                                                ATATGAATAAT-CATGGAAAATTATTATCCTTTGAAAACTGATTGATAAATATTTCCCC
                                                                    GTTAGGCGATGGATTATATTTTCTTGGCTTGTTGTATACCCATTGGCCAGGGCCTTTATA
                                                                                                                                                          AGGACTCCCAAAAGCATTTTGAAGAATGGCAATATCAAATAAGTGTATGTCCTCTCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GIGITIGIAICCAGAGICTICCIGICATIGIAALAAAAAITITAIIT 1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1961
                                                2500
                                                                                           2559
                                                                                                                                     2619
                                                                                                                                                                                2677
                                                                                                                                                                                                                            2737
                                                                                                                                                                                                                                                                       2797
                                                                                                                                                                                                                                                                                                                  2856
                                                                                                                                                                                                                                                                                                                                                             2916
                                                                                                                                                                                                                                                                                                                                                                                    1081
                                                                                                                                                                                                                                                                                                                                                                                                         2976
                                                                                                                                                                                                                                                                                                                                                                                                                               1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                    3036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1261
                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                             196
                                                                                                                                                                                                                                                                                                                                        1021
                                                                     661
                                                                                                                 721
                                                                                                                                                            781
                                                                                                                                                                                                                                                  901
                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                           원 상 명
                                                                                                             8 8 8
                                                                                                                                                                             g
                                                                                                                                                                                                    ò
                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                            6 B 6
                                                                                                                                                                                                                                                                                                              원 상 명
                                                                                                                                                                                                                                                                                                                                                                              8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                               ሪ ይ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              රි සි
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
    8 8
```

1144 1264 1324 1444 1504 1564 09-JAN-2002 ATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATATCAT 1204 TGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGAGGAC 1384 401 341 223 164 521 461 20 rcicciaatarccatacgcaagtgigitarcacacaaatrcactagtcr-gttraaaaa CCTTTTGTACGTCTAGGGCTACCCAAGTGAAGTGAATATATAAGCAAAATGTGT ACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTTAGAGATATTCAAGCAATGC TACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTTAAAC TCTCCTAATATCCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCTGGTTTAAAAA CACTTGGTACTACACCCAGAAACTCAAAATTGTCTTTTTCTCCTGATGAGATATGGGGGTGT centingiacenciaece---nacenaecaereacidariararitaec-aaarete 1025 IGAIAAAIAITITICIGAIGITACIAGCIAIGGGAAAIIAGAACIGGCACAACCCIGACAI Gaps PAT 6 TIGIATCCAGAGICTICCTGTCATTGTAAAAAATTTATTAAAAA 1612 Score 475; DB 6; Length 580; Pred. No. 2.6e-81; 0; Mismatches 16; Indels linear AX334874 580 bp D Sequence 5383 from Patent WO0194629. AX334874 RESULT 10
AX334874/c
LOCUS
DEFINITION
ACCESSION

RESULT 9 AX332151/c

7;

Gaps ٠. م

Match

ORIGIN

Query Mat Best Loca Matches

셤 ò 원 ò g $\dot{\delta}$

source

JOURNAL FEATURES

TITLE

VERSION KEYWORDS SOURCE ORGANISM

REFERENCE AUTHORS

```
Young, P.E., Augustus, M., Carter, K.C., Ebner, R., Endress, G., Hortigan, S., Soppet, D.R. and Weaver, Z. Cancer gene determination and therapeutic screening using signature gene sets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TACTAAGTGGAAATGTTAGGATTTTTCGGCATCCCATGTTAGAATCTCTAAAATTTAAAC 1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCTGGTTTAAAAA 1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACTTGGTACTACACCCAGAAACTCAAAATTGTCTTTTCTCCTGATGAGATATGGGGTGT 1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    281 TGAATTCTTTATATTGACT-GGTGTTCCACATATTTCAGTAATTTCTGTTATGAGAGGAC 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  222 TTGAAATAGCAAATTG-CCACACAGTTAACTGGATAGACCACGTACGTGGTGATCATAAC 164
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       520 TACTAAGTGGAAATGTTAGGATTTTTTCGGCATCGCATGTTAGAATCTCTAAAATTTAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   400 ACCATTAACTATGAAAGCTTTTAATTCCTAAAATAGTTTTAGAGATATTCAAGCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     340 TCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCT-GTTTAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      163 CACTIGGTACTACACCCAGAAACTCAAAATIGIC-TTICICCTGAIGAGAIAT-GGGIGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   580 TGATANATATTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      460 ATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1205 ACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTTTTGTACGTCTAGGGCCTAGGGTACCCAAGTGAAGTGAATATATAAGCAAAATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1025 TGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1145 ATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   105 CCTTTTGTACGTCTAGGCC---TAGGTAACCAGTGGAGTGATTATTAGC-AAATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1565 ITGIATCCAGAGICTTCCTGTCATTGTAATAAAATTTAATAAAA 1612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 580;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TIGHT TO THE TOTAL COLOR OF THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SAFET TO THE TOTAL AND A SA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 475; DB 6; Length 58 Pred. No. 2.6e-81; 0; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                             Patent: WO 0194629-A 5796 13-DEC-2001;
Avalon Pharmaceuticals (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 6368 from Patent W00194629. AX335859

    .580
    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX335859.1 GI:18126578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29.3%;
ral Similarity 95.7%;
563; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1385 '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local
Matches 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
AX335859/c
LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
ORGANISM
   ORGANISM
                                                                                                   REFERENCE
                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       심
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                         Young, P.E., Augustus, M., Carter, K.C., Ebner, R., Endress, G.,, Apprariam, S., Soppet, D.R. and Weaver, Z. Cancer gene determination and therapeutic screening using signature gene sets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 09-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1085 TACTAAGTGGAAATGTTAGGATTTTTTCGGCATCGCATGTTAGAATCTCTAAAATTTAAAC 1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGC 1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCTGGTTTAAAAA 1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAAATCTTTATATTGACTGGGTGTCCCACATATTTCCAGTAATTTCTGTTATGAGAGGAC 1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1445 CACTIGGTACTACACCCAGAAACTCAAAATIGICITITICICCIGAIGAGATAIGGGGIGT 1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTTTTGTACGTCTAGGGCCTAGGGTACCCAAGTGAAGTGAATATATAAGCAAAATGTGT 1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGGAATGC 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               281 TGAATTCTTTATATTGACT-GGTGTTCCACATATTTCAGTAATTTCTGTTATGAGAGGAC 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            222 TIGAAATAGCAAATIG-CCACACAGTTAACTGGATAGACCACGTACGTGGTGATCATAAC 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITATCAATATGAATTCTGAAGGCCAATATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAAATTCACTAGTCT-GTTTAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1025 TGATAAATATTTTCTGATGTTACTAGGTATGGGAAATTAGAACTGGCACAACCCTGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          460 ATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGATANATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 520 TACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTTAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACTTGGTACTACACCCCAGAAACTCAAAATTGTC-TTTCTCCTGATGAGATAT-GGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   105 ccititigraccitcraccc---raccraccactedacteatrararracc-aaarcrer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1565 TIGIATCCAGAGICTICCIGICATIGIAAIAAAAATITATITAAAAA 1612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 580;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGTTATCCAGAGTCTTCCTGTCATTGTAATAAAAATTTATTAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 475; DB 6;
Pred. No. 2.6e-81;
0; Mismatches 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                         Patent: WO 0194629-A 5383 13-DEC-2001;
Avalon Pharmaceuticals (US)
Location/Qualifiers
1. 580
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 5796 from Patent WO0194629. AX335287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTCCTGTTAAATGACTAAGGTTTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX335287.1 GI:18126006
GI:18125593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29.3%;
llarity 95.7%;
Conservative
                                                            Homo sapiens (human)
                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
les 563; Conserv
AX334874.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                49
```

1264

401

341

461

```
PAT 09-JAN-2002
                                                                                                                                          Homo sapiens (human)
Almon sapiens
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
linear
```

Homo sapiens (human)

RESULT 11
AX335287/c
LOCUS
DEFINITION
ACCESSION
KERWORDS
SOURCE

엄

ઠે 윉 8 g

g

ઠે g

ઠ g ò 1564

```
unpublished

S Birren, B., Linton, L., Nusbaum, C., Lander, E., Ali, A., Allen, N., Anderson, S., Barta, N., Bastlen, V., Bogalavki, L., Boukhgalter, B., Brown, A., Campoplano, A., Chang, J., Chazaro, B., Choepel, Y., Colangelo, M., Collins, S., Collymore, A., Cook, A., Cooke, P., DoArellano, K., Dewar, K., Diaz, J.S., Dodge, S., Faro, S., Faro, S., Fareita, P., FitzHugh, M., Galagan, J., Gardyna, S., Ginde, S., Gord, S., Goyette, M., Graham, L., Grand-Pierre, N., Hagos, B., Horton, L., Hulme, W., Iliev, I., Johnson, R., Jones, C., Kamat, A., Karatas, A., Kells, C., Landers, K., Lamazares, R., Landers, T., Lehoczky, J., Levine, R., Liu, G., MacLean, C., McCarnan, R., Major, J., Marquis, N., Mathews, C., McCart, M., Major, J., Marquis, N., Mathews, T., McKernan, K., Major, J., Nguyen, C., Nicol, R., Norbu, C., Norman, C.H., O'Connor, T., O'Donnell, P., Maron, J., Petrason, K., Phunkhang, P., Pierre, N., Pollara, V., Raymond, C., Retta, R., Rieback, M., Riley, R., Rise, C., Rogov, P., Roman, J., Sewery, P., Spencer, B., Stange, T., Coham, N., Strauss, N., Subramanian, A., Talamas, J., Tesfaye, S., Theodore, J., Viel, R., Vo, A., Wilson, B., Wu, X., Waman, D., Ye, W.J., Young, G., Zainoun, J., Zembek, L., Zimmer, A. and Zody, M. Canter for Genome Submitted (18-FBB-2002) Whitehead Institute/MIT Center for Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Birren, B., Nusbaum, C., Lander, E., Abouelleil, A., Allen, N., Andernon, H. M., Barna, N., Bastien, V., Bloom, T., Anderson, M., Arachchi, H. M., Barna, N., Bastien, V., Bloom, T., Boukhgalter, B., Camarata, J., Chang, J., Choepel, Y., Collymore, A., Cook, A., Cooke, P., Carum, B., DeArellano, K., Diaz, J.S., Dodge, S., Dooley, F., Dorris, L., Erickson, J., Paro, S., Graham, L., Grand-Pierre, N., Hafez, N., Hagen, D., Galagan, J., Gardyna, S., Graham, J., Grand-Pierre, N., Hafez, N., Hagopian, D., Hagos, B., Hall, J., Horton, L., Hulme, W., Ilier, Y., Johnson, R., Jones, C., Lindblad-Toh, K., Liu, X., Lui, A., Mabbitt, R., Maclean, C., Macdonald, P., Major, J., Manning, J., Matthews, C., McCarthy, M., Meldrim, J., Meneus, L., Mihova, T., Mabbitt, R., Kais, C., McCarthy, M., Nguyen, C., Nicoll, R., Norbu, C., Connor, T., O'Donnell, P., O'Neil, D., Oliver, J., Peterson, K., Phunkhang, P., Pierre, N., Schupka, A., Ramasamy, U., Raymond, C., Retta, R., Riec, C., Rogov, P., Spencer, B., Stange-Thomann, N., Stojanovic, N., Stubbs, M., Talams, J., Tesfaye, S., Theodore, J., Topham, K., Travers, M., Vassillev, H., Vormar, S., Viel, R., Vo, A., Wilson, B., Wu, X., Wassillev, H., Vormar, V., Wiel, R., Vo, A., Wilson, B., Willer, Y., Volly, C., Zalnoun, J., Zalmmer, A. and Zody, M. Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (18-FEB-2002) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA
Research, 320 Charles Street, Cambridge, MA 02141, USA
3 (bases 1 to 231508)
Birren,B., Nusbaum,C., Lander,E., Abouelleil,A., Allen,N., Anderson,M., Arachchi,H.M., Barna,N., Bastien,V., Bloom,T., Boukhgalter,B., Camarata,J., Chang,J., Choepel,Y., Collymore,A., Cook,A., Cook,P., Corum,B., DeArellano,K., Chang,J., Chong,J., Faro,S., Ferreira,P., FitzGerald,M., Gage,D., Galagan,J., Gardyna,S., Graham,L., Grander,P., FitzGerald,M., Hafez,N., Hagopian,D., Hagos,E., Kamat,A., Karatas,A., Kells,C., Landers,T., Landers,T., Landers,T., Landers,T., Landers,T., Machin,J., Machin,J., Manchal,J., Machin,J., Manchal,J., Matchews,C., Macdonadd,P., Major,J., Mhova,T., Manchang,V., Murphy,T., Naylor,J., Naylor,J., Schuper,R., Phunkhang,P., Pierre,N., Ramasamy,U., Rawmond,C., Retta,R., Rise,C., Raitt,A., Ramasamy,U., Raymond,C., Retta,R., Travers,M., Talamas,J., Tesfaye,S., Theodore,J., Topham,K., Travers,M., Vassiliev,H., Venketaraman,V.S., Vassiliev,H., Venketaraman,V.S., Viel,R., Vo,A., Wilson,B., Wu,X., Wyman,D., Young,G. Zainoun,J., Zembek,L., Zimmer,A., and Zody,M. Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (03-JUL-2003) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA 4 (bases 1 to 231508)
Unpublished
JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1325 TGAAATCTTTATATTGACTGGGTGTCCCACATATTCCAGTAATTTCTGTTATGAGAGGAC 1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ROD 30-SEP-2003
                                  Young, P.E., Augustus, M., Carter, K.C., Ebner, R., Endress, G., Horrigan, S., Soppet, D.R. and Weaver, Z. Cancer gene determination and therapeutic screening using signature gene sets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1025 TGATAAATATTTTCTGATGTTACTAGCTATGGGAAATTAGAACTGGCACAACCCTGACAT 1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1085 TACTAAGTGGAAATGTTAGGATTTTTCGGCATGCATGTTAGAATCTCTAAAATTTAAAC 1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1205 ACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGC 1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1265 TCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCTGGTTTAAAA 1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1445 CACTTGGTACTACACCCAGAAACTCAAAATTGTCTTTTCTCCTGATGAGATATGGGGTGT 1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                340 TCTCCTAATATCCATACGCAAGTGTGTTTATGACACAAATTCACTAGTCT-GTTTAAAAA 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   281 TGAATTCTTTATATTGACT-GGTGTTCCACATATTTCAGTAATTTCTGTTATGAGGGGC 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        222 TTGAAATAGCAAATTG-CCACACAGTTAACTGGATAGACCACGTACGTGGTGATCATAAC 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus. 1 (bases 1 to 231508)
Birren, B., Nusbeum, C. and Lander, E.
Mus musculus chromosome 9, clone RP23-152016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ......o, 231508 bp DNA linear ROD 30-SEP-20
Mus musculus chromosome 9, clone RP23-152016, complete sequence.
AC111087
AC111087.9 GI:33300743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 520 TACTAAGTGGAAATGTTAGGATTTTTCGGCATCGCATGTTAGAATCTCTAAAATTTAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        400 ACCATTAACTATGAAAGCTTTTAATTCCTAAAAATAGTTTTAGAGATATTCAAGCAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       105 CCTTTTGTACGTCTAGGCC---TAGGTAACCAGTGAGTGATTATATTAGC-AAATGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1145 ATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       460 ATTCCTGTTAAATGACTAAGGTTTGCTTTTATCAATATGAATTCTGAAGGCCAATATCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>س</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 29.3%; Score 475; DB 6; Length 580; Best Local Similarity 95.7%; Pred. No. 2.6e-81; Matches 563; Conservative 0; Mismatches 16; Indels
                                                                                                                                                                      Patent: WO 0194629-A 6368 13-DEC-2001;
Avalon Pharmaceuticals (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                           /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AC111087/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
       REFERENCE
                                         AUTHORS
                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                     FEATURES
                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
```

g ઠે g à

g ò 셤 ò 셤 셤 ઠે d ð g 8

d

us-10-051-835-15.rge

unsure unsure repeat repeat repeat repeat	repeat repeat repeat repeat repeat repeat	repeat_ repeat_ Query Matc Best Local Matches 5	6668	, 6662 34.	6656 656 677	6644 6644 6638
		S S S S S S S S S S S S S S S S S S S	8 A 8	\$ 8 \$	8 8 8	o a o a o a o
	Talamas, J., Tesfaye, S., Vassilav, H., Venkatari Wyman, D., Young, G., Zaz Direct Submission Submitted (30-SEP-2003) Research, 320 Charles On Jul 29, 2003 this son Jul 29, 2003 this son Jul 29, 2003 this son Jul 29, 2003 this son Http://ftp.genome.wash.http://ftp.genome.wash.ltp://ftp.genome.wash.ltp://ftp.genome.wash.ltp://ftp.genome.wash.ltp://ftp.genome.wash.ltp://ftp.genome.wash.ltp://ftp.genome.wash.ltp://ftp.genome.wash.ltp://ftp.genome.wash.ltp://ftp.genome.wash.ltp://ftp.genome.wash.ltp://ftp.genome.wash.ltp://ftp.genome.wash.ltp://ftp.genome.wash.ltp://ftp.genome.wash.ltp://ftp.genome.wash.ltp://ftp.genome.wash.ltp.genome.com.dem.genome.genom	cerer clone name: 15216 Location/Qualifiers 1. 231508 /organism="Mus musculus" /mol_type="genomic DNA" /db_xref="taxon:10090" /dnrosome="9" /dnrosome="9" /dnroseme="9" /dnroseme="9" /dnroseme="9" /dnroseme="9" /dnroseme="9" /dnroseme="9" /dnroseme="9" /dnrose="9" /d	eature 1		_region _region	region
JOURNAL REFERENCE AUTHORS	TITLE JOURNAL. .COMMENT	FEATURES SOURC	misc_f unsure	unsure	repeat repeat unsure	unsure unsure repeat unsure

```
25 igigigigidiadificaraharritcaraaaarriraarrichaarritraarritraageses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       65 CTGAGATCCTTGTTGAAATGCGGCAGTCAGGGGAAAGAGAGCTTCAAAATGAGAATAC 66506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     45 TCAGGTCTTATGCTGGGATGCAGTAGACA-GGAGATGGGGAAATTAGAAAAGAGAACTGT 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 85 TCTAACAGAGGAAGTTCAAGTCACTTCAATTAAAGAAACATTTTTGAGCATGGGACCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64 AACAT-----ACCAGGATAAAGATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           87; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ch 7.3%; Score 118.2; DB 10; Length 231508; I Similarity 55.0%; Pred. No. 3.1e-13; 556; Conservative 0; Mismatches 368; Indels 87; G
3909. .3933

/rpt feanily="(TTTTG)n"

complement (4174. .4190)

/note="single clone coverage"

4291. .4413

/note="single clone coverage"

complement (4780. .4869)

/rpt_family="MIR"

/rpt_family="RSINE1"

/rpt_family="RSINE1"
                                                                                                                                                                                                                                                              /rpt_family="B2_Mm1"
5823. 5833 _ Mm1"
/rpt_family="B3A"
5841_ 5947
                                                                                                                                                                                                                                                                                                                                                                                                                   8809-.8905

TPL family="MLTID"

8906-.9147

/rpt family="MTE"

/rpt family="ISI..9464)

/rpt_family="IAPLTR1_MM"

9466..9479
                                                                                                                                                                                                                                                                                                                                               b330. .6355
/rpt_family="AT_rich"
7348. 7502
/rpt_family="ORRID"
8809. .8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      / TPL family="MTE"

9480. .9689

/ TPL family="RLTR10C"

9690. .9718

/ TPL family=" (GA) n"

9716. .9916

/ TPL family=" (GA) n"
                                                                                                                                               5355. .5389
/rpt_family="(TAA)n"
5394. .5547
/rpt_family="193A"
5548. .5608
/rpt_family="(CA)n"
5609. .5635
/rpt_family="(CA)n"
/rpt_family="193A"
/rpt_family="193A"
                                                                                                                                                                                                                                                                                                                    5841. .5947
/rpt_family="Lx8"
6330. .625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       region
                                                                                                                                                                           region
                                                                                                                                                                                                                                      _region
                                                                                                                                                                                                                                                                   region
                                                                                                                                                                                                                                                                                               region
                                                                                                                                                                                                                                                                                                                            t_region
                                                                                                                                                                                                                                                                                                                                                        region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               region
                                                                                                                  règion
                                                                                                                                                                                                                                                                                                                                                                                       region.
                                                                                                                                                                                                                                                                                                                                                                                                                                              region
    region
                                                                                       _region
                                                                                                                                                   _region
                                                                                                                                                                                                                                                                                                                                                                                                                   region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     region
                                                                                                                                                                                                              region
```

13;

76 AAGTTTAGAAACTAACATTAATATGAATAATGCATGGAAAATTATTATCCTTTGA 635

16 AAGTGTGCATTCTTTGTTTCCTAAATATGATTTTACTGCTTGAAATTACATTTGAGTTG 575

45 AATGTGAATATGGATCTAATGATGATATCAAAAACTGTAATGCCTTCAAAGTAGATGA 66386

g

ઠે

d

ò

원 ò g δ g ò g

ð

g

ò g $\stackrel{\diamond}{\circ}$ g ð g

ò

```
Oliver, J., Peterson, K., Phunkhang, P., Pierre, N., Pollara, V., Raymond, C., Retta, R., Rieback, M., Riley, R., Rise, C., Rogov, P., Roman, J., Rosetti, M., Roy, A., Santos, R., Schauer, S., Schupback, R., Strauss, N., Subramanian, A., Santos, R., Schauer, S., Schupback, R., Trauss, N., Tavery, P., Spencer, B., Stange-Thomann, N., Stojanovic, N., Tophan, K., Travers, M., Traver, B., Trayli, N., Trayli, Traver, M., Trayli, N., Trayli, Trayli, Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Trayli, N., Tr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (13-ARP-2003) Whitehead Institute/MIT Center for Genome Stearch, 320 Chales Street, Cambridge, MA 02141, USA On Apr 17, 2003 this sequence version replaced gi:19881957.

All repeats were identified using RepeatMasker.

Smit, A.F.A. & Green, P. (1996-1997)

http://ftp.genome.washington.edu/RM/RepeatMasker.html

Center: Whitehead Institute/ MIT Center for Genome Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NOTE: This is a 'working draft' sequence. It currently consists of 35 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Center code: WIBR
Web site: http://www-seq.wi.mit.edu
Contact: sequence submissions@genome.wi.mit.edu
Contact: Recolect Information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               57828: contig of 57828 bp in length 57928: gap of 100 bp 58552: contig of 624 bp in length 58652: gap of 100 bp 586779: contig of 27 bp in length 58779: gap of 100 bp in length 58779: gap of 100 bp in length 58499: contig of 620 bp in length 66497: contig of 998 bp in length 66597: gap of 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100 bp
of 998 bp in length
100 bp
of 677 bp in length
100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100 bp
of 1038 bp i
100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Center project name: L22412
Center clone name: 122 E 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    contig of
gap of 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   contig
gap of
contig
gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61274:
61374:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 63489:
63589:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62351:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        as soon as ... be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     57829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    58553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     58680
59400
59500
60498
60598
61275
61375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62452
63490
                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S Birren, B. Linton, L., Nusbaum, C., Lander, E., Ali, A., Allen, N., Anderson, S., Barna, N., Bastien, V., Bloom, T., Boguslavkiy, L., Anderson, S., Barna, N., Bastien, V., Bloom, T., Boguslavkiy, L., Boukhgalter, B., Brown, A., Camarata, J., Campopiano, A., Chang, J., Chazaro, B., Choepel, Y., Colangelo, M., Collins, S., Collymore, A., Cook, A., Cook, P., Dearellano, K., Dear, K., Diaz, J.S., Dodge, S., Faro, S., Ferreira, P., Fitzhigh, W., Gage, D., Galagan, J., Gardyna, S., Ginde, S., Govette, M., Graham, L., Grand-Pierre, N., Karatas, A., Kells, C., Lakocque, K., Lamazares, R., Landers, T., Levine, R., Lindblad-Toh, K., Liu, G., MacLean, C., Macdonald, P., Major, J., Marquis, N., Matthews, C., McCarthy, M., McEwan, P., McKernan, K., Meldrim, J., Meneus, L., Mihova, T., Mlenga, V., Murphy, T., Naylor, J., Nguyen, C., Nicol, R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        66035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                55859 ACCATATGTTTGAGTTCATATTAATATGAACAAATTCATATTAAATGACTTCATTATGAC 65800
                               ----CTTAAACTGTAATATGTTGTTAATAGTAATACCCATGGA 66285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 66152 TAAATCAGTGCATGTTTTCTAACAAG-GAAAGTTTTAATAGTTAAATCCCAAGTACATAT 66094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              56034 ATROCGINI --- ACAGAGAARAACAGIARATIRAARCARIGGIGIALTIRAGGATATIT 65979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              65978 TCAGATCTAAAGAAACCATTAATAAATCCTTGACAAATATTTCATGGAGTCTGCAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            995 TCAGGTCTAATGAAACCAATATTGAATCTCTGATAAATATTTTCTGATGTTACTAGCTAT 1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1055 GGGAAATTAGAACTGGCACAAACCCTGACATTACTAAGTGGAAATGTTAGGATTTTTCGGC 1114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1115 ATCGCATGTTAGAAT --- CTCTAAAATTTAAACATTCCTGTTAAATGACTAAGGTTTGCT 1171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AC116714 256138 bp DNA linear HTG 23-APR-2003
Mus musculus clone RP23-122E19, WORKING DRAFT SEQUENCE, 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          875
                                                                                                                                                                                                                                                                                                                                                             815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. I (bases 1 to 256138)
Birren, B., Nusbaum, C. and Lander, E. Mus. musculus, clone RP23-122E19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTCCCTTTTAGAAACAAGAATAACAATAAGTTTTAATAGTTGCCATACTTAGCAT-TTA 994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         66284 AACCATTATCTTCTGAACATTTTACCT-GTTTGGATATGGCTATGAGTCATTTGAAGCAA
                                                                                                                                                                                                                      696 GITICAAAATAAAGGAAGGTAGCAAGTTAGGCGATGGATTATATTTTCTTGGCTTGTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                    66188 -------caadacarcarcacarcarringergar-caadrah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   816 CAAATAAGTGTATGTCCTCTCAAATGAGGCATTTTTAATTGTTACAATCTATTTGGACGC
                                                                                         636 AAACTGATTGATAAATATATTCCCCCTCCTTTAGAACAGTCAAAAGCCACTTCAAACAA
                                                                                                                                                                                                                                                                                    66225 Griacada-----caagicageageagaragaricierri------
                                                                                                                                                                                                                                                                                                                                                      756 ATACCCATTGGCCAGGGCCTTTATAAGGACTCCCAAAAGCATTTTGAAGAATGGCAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               65799 TCTTTCTTATCATTTCTAAAAGCCAACACTACATAAACAACAACAATAAC 65749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1172 ITTATCAATATGAATTCTGAAGGCCAATATCATACCATTAACTATGAAAGC 1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACI16714.2 GI:30018030
HTG; HTGS PHASE1; HTGS DRAFT.
Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mordered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AC116714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 14
AC116714
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
```

```
1988 145897: gap of 100 bp

1988 172346: contig of 26449 bp in length

1347 172446: gap of 100 bp

1367 218302: contig of 45756 bp in length

1203 218302: gap of 100 bp

1203 218302: gap of 100 bp

1204 256138: contig of 37836 bp in length

1. 256138: contig of 37836 bp in length

1. 256138: days musculus"

| mol type="genomic DNA"

| db xref="taxon:10090"

| clone="RP23-122E19"
                                                                                                                                                                                                                                                                                                                                               100 bp
y of 1141 bp in length
f 100 bp
q of 1067 bp in length
                                                                                                                                                                                                       100 bp
of 706 bp in length
100 bp
of 1325 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100 bp of 11984 bp in length 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gap of 100 bp
contig of 18769 bp in length
gap of 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     contig of 14860 bp in length
gap of 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gap of 100 bp contig of 9719 bp in length gap of 100 bp
                                        of 993 bp in length
100 bp
of 943 bp in length
of 715 bp in length
of 713 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0 bp
1302 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100 bp
of 1903 bp in length
100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ) bp
1232 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0 bp
1330 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gap of 100 bp
contig of 1307 bp in length
                                                                                                                                                                                                                                                                                                                           1348 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1190 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ) bp
1674 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1655 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1715 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     in length
  bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rolone lib="RPCI-23 Female Mouse BAC"
1. .57828
note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0 bp
1654 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57929. .58552
/note="assembly_fragment"
58653. .58679
/note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note="assembly_fragment"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                contig of gap of 100 gap of 100 gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             contig of
gap of 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     contig of
gap of 100
contig of
gap of 100
contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gap of 100 contig of 200 contig of gap of 100 gap of 100 gap of 100
                                                                                                                                                                                                                                  contig of gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap of 10 gap
                                                                                          contig of
gap of 10
contig of
gap of 10
contig of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                contig of
gap of 10
                                                                                                                                                                                                            gap of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     clone_end:SP6 ____
vector_side:left"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8780. .59399
                                                                                                                                                                                                                                668117
668823
770248
7716348
7716348
7717393
7717393
7717393
7717393
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771748
771
63590
64253
64353
65346
65346
66389
66489
67204
67304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
```

```
16933 creacarccrrorricaaariccecacrcacacacacaaacacacarcaaaarcaaaarac 16992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17053 AATGTGAATATGGATCTAATGATGAAAATCAAAAACTGTAATGCCTTCAAAGTAGATGA 17112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17113 AAATATATCTTTCATGTTTCCCAAAATAGCATGTCTCTGCATGAGTCAATTTTGATTTG 17172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17214 AACCATTATCTTCTGAACATTTTACCT-GTTTGGATATGGCTATGAGTCATTTGAAGCAA 17272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17273 GTTACAAA-----CAAGTCAGGCAGGGATAGATTCTGTCTT-------- 17309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            816 CAAATAAGTGTATGTCCTCTCAAATGAGGGATTTTTAATTGTTACAATCTATTTGGACGC 875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        576 AAGTTTAGAAACTAACATAGCATTAATATGAATAATGCATGGAAAATTATTATCCTTTGA 635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATACCCATTGGCCAGGGCCTTTATAAGGACTCCCAAAAGCATTTTGAAGAATGGCAATAT 815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         636 AAACTGATTGATAAATATATTTCCCCCTCCTTTAGAAACAGTCAAAAGCCACTTCAAACAA 695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGTGTGCATTCTTTGTTTCCTAAAATATGATTTTACTGCTTGAAATTACATTTGAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      285 TCTAACAGAGAAGTTCAAGTCACTTCAATTAAAGAAACATTTTTGAGCATGGGACCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      345 TCAGGTCTTATGCTGGGATGCAGTAGACA-GGAGATGGGGGAAATTAGAAAAGAGAACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        464 AACAT-----ACCAGGATAAAGATGTCAAATGAGTGTGACTCCCTTAAAGTAGATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 256138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 118.2; DB 2;
Pred. No. 3e-13;
0; Mismatches 368;
/note="assembly_fragment"
[61375. .61351]
.note="assembly_fragment"
62452. .63489
.note="assembly_fragment"
63590. .64259
.note="assembly_fragment"
64353. .65348
.note="assembly_fragment"
6446. .66388
.note="assembly_fragment"
65446. .66388
.note="assembly_fragment"
6499. .66388
.note="assembly_fragment"
6490. .68016
.note="assembly_fragment"
64917. .68016
.note="assembly_fragment"
68117. .68022
.note="assembly_fragment"
6813. .10247
.note="assembly_fragment"
6813. .30348
                                                                                                                                                                                                                                                                                                                                  /note="assembly_fragment"
71796 .72936
70 note="assembly_fragment"
73037 .74103
/note="assembly_fragment"
74204 .75393
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 55.0%;
Matches 556; Conservative
                                                                                                                                                   misc_feature
                                                     misc_feature
                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                       misc_feature
                                                                                     misc_feature
                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              969 .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            임
```

g ò Вb $\stackrel{\sim}{\circ}$ g ઠે 엄 ò 셤 Š 엄

ò

```
Submitted (15-7002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA
On Nov 15, 2002 this sequence version replaced gi:23908401.
The sequence in this assembly is a combination of BAC based reads and whole genome shotgun sequencing reads assembled using Atlas (http://www.hgsc.bcm.imc.edu/projecs/rat/). Each contig described in the feature table below represents a scaffold in the Atlas assembly (a 'contig-scaffold'). Within each contig-scaffold, individual sequence contigs are ordered and oriented, and separated by sized gaps filled with Ns to the estimated size. The sequence may extend beyond the ends of the clone and there may be sequence contigs within a contig-scaffold that consist entirely of whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence reads. Both end sequences and whole genome table.
Plopper, F., Poindexter, A., Popovic, D., Primus, E., Pu, L.-L., Pluzz, M., Quiroz, J., Radhlin, E., Revers, K., Redjer, M.A., Reigh, R., Railly, M., Ren, Y., Reuter, M., Richards, S., Riggs, F., Rives, C., Rodkey, T., Rojas, A., Rose, M., Rose, R., Ruiz, S.J., Sanders, W., Savery, G., Scherer, S., Scott, G., Shatsman, S., Shen, H., Shetty, J., Shvartsbeyn, A., Sisson, I., Sitter, C.D., Smajs, D., Steinle, R., Strong, R., Strong, N., Strong, R., Strong, R., Strong, R., Strong, R., Strong, R., Strong, R., Waldron, L., Walker, B., Wang, J., Taylor, T., Thomas, M., Thomas, G., Tingey, A., Trejos, Z., Usmani, K., Valas, R., Vora, V., Villasana, D., Waldron, L., Walker, B., Wang, J., Walliams, G., Willson, R., Wleczyk, R., Wooden, H., Worley, K., Wright, D., Wright, R., Wu, J., Yakub, S., Yen, J., Yoon, U., Yoon, V., Weisht, R., Wu, J., Zhao, S., Dunn, D., Von, Niederhausern, A., Weiss, R., Smith, D.R., Smith, H.O., Weinstock, G., and Gibbs, R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NOTE: Estimated insert size may differ from sequence length (see http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_data.html). NOTE: This is a 'working draft' sequence. It currently consists of 1 conties. Gaps between the contigs are represented as runs of N. The order of the pieces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Theres 1 to 202314)
Rat Genome Sequencing Consortium.
Butcet Submission

Submitted (03-5EP-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA

A (bases 1 to 202314)
Rat Genome Sequencing Consortium.

Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   is believed to be correct as given, however the sizes of the gaps between them are based on estimates that have provided by the submittor.

This sequence will be replaced by the finished sequence as soon as it is available and the accession number will be preserved.

I 202314: contig of 202314 bp in length.

I. 202314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Center code: BCM
Web site: http://www.hgsc.bcm.tmc.edu/
Contact: hgsc-help@bcm.tmc.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Center: Baylor College of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Direct Submission
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 l (bases 1 to 202314)

Muzny, D. Marte., Metzker, M. Lee., Abramzon, S., Adams, C., Alder, J., Alsbrooks, S., Amin, A., Anguiano, D., Allen, H., Alsbrooks, S., Amin, A., Anguiano, D., Banderchi, W., Barder, E., Baden, B., Benahmed, F., Baldwin, D., Banderchiske, D., Barcher, M., Barcas, E., Baden, B., Bardardol, M., Bandardol, B., Barcher, M., Barcheron, E., Casar, H., Carler, A., Cardens, V., Carter, X., Cavazos, I., Casar, H., Center, A., Chavez, D., Chavez, D., Chen, R., Chen, Y., Chen, Z., Chu, J., Chacko, J., Chavez, D., Chen, R., Corkerl, R., Cox, Coyle, M., Cree, A., D'Souza, L., Davis, C., Coyle, M., Cree, A., D'Souza, L., Davis, C., Davy, Carroll, L., De Anda, C., Dederich, D., Delgado, O., Denson, S., Dunn, A., Durdhin, K., Duval, B., Eaves, K., Egan, A., Escotto, M., Eugene, C., Evans, C.A., Falls, T., Fan, G., Fernandez, S., Finley, M., Flagg, N., Forbes, L., Foster, M., Garza, M., Gabaiet, A., Ganer, C., Hamilton, C., Hamilton, K., Harvey, Y., Havland, W., Hamil, C., Hamilton, C., Hamilton, K., Harnandez, R., Hawes, A., Handerson, N., Hernandez, J., Johnson, R., Johnson, R., Johnson, R., Johnson, R., Johnson, R., Johnson, R., Johnson, R., Johnson, R., Johnson, R., Johnson, R., Johnson, R., Johnson, R., Johnson, R., Johnson, R., Liu, Y., Liu, W., Liu, Y., Lowan, J., Levan, J., Liu, W., Liu, Y., Lowan, J., Levan, J., Lowis, L., Lobow, H., Levan, J., Lewis, L., Liu, Y., Liu, W., Liu, Y., Lowan, J., Lewis, L., Liu, W., Liu, Y., London, P., Longacre, S., Lopez, J., Liu, W., Liu, Y., London, P., Longacre, S., Lopez, J., Liu, W., Liu, Y., London, P., Longacre, S., Lopez, J., Liu, Y., London, P., Longacre, S., Lopez, J., Liu, W., Liu, Y., London, P., Longacre, S., Lopez, J., Liu, W., Mahindartne, M., Martin, K., Martin, R., Mayus, P., Martin, K., Martin, R., Mayus, P., Martin, K., Martin, R., Mayus, P., Martin, K., Martin, R., Mayus, P., Martin, K., Martin, R., Mayus, P., Martin, R., Mayus, P., Martin, R., Mayus, P., Martin, R., Mayuso, L., Newton, N., Norris, C., Nesternak, S., Paul, H., Perez, L., Pauly,
                                                                                                                                                                                                                                                                                                                                      17464 ATTCCGTTT----ACAGAGAATAACAGTATATTTAAATCATTGCTGTATTTÄGCATATTT 17519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17520 TCAGATCTAAAGAAACCATTAATAAATCCTTGACAAATATTTCATGGAGTCTGCAGTGCT 17579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17580 GGGAAACCAAACATGGTGGAAGCTTGACTTAACTAACCAG-AGTTTTATATAATTCTGGAGC 17638
             17346 TAAATCAGTGCATGTTTTCTAACAAG-GAAAGTTTTAATAGTTAAATCCCAAGTACATAT 17404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17639 ACCATATGTTTGAGTTCATATTAATATGAACAAATTCATATTAAATGACTTCATTATGAC 17698
                                                                                                                                                                                                                                                                                                                                                                                                                             1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1055 GGGAAATTAGAACTGGCACAACCCTGACATTACTAAGTGGAAATGTTAGGATTTTTCGGC 1114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AC132694 202314 bp DNA linear HTG 15-NOV-2002 Rattus norvegicus clone CH230-490C22, WORKING DRAFT SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1115 ATCGCATGTTAGAAT---CTCTAAAATTTAAACATTCCTGTTAAATGACTAAGGTTTGCT 1171
                                                                                                                                                                                                                                                            ATTCCCTTTTAGAAACAAGAATAACAATAAGTTTTAATAGTTGCCATACTTAGCAT-TTA 994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae,
                                                                                                                                                                     raaaagreregrargrirarraaaagraagrirraarrarra-rearrargreerarr
                                                                                           TCAGGTTATGATATGTTATGAAAAATAAGCTTCATTATTTTTTTATAGCTACATCCTATT
                                                                                                                                                                                                                                                                                                                                                                                                                             TCAGGTCTAATGAAACCAATATTGAATCTCTCTGATAAATATTTTTCTGATGTTACTAGCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17699 icitrictratcartrictaaagccaacactacaraaacaacaacaataac 17749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1172 ITTATCAATATGAATTCTGAAGGCCAATATCATACCATTAACTATGAAAGC 1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AC132694.3 GI:25007304
HTG; HTGS PHASE2; HTGS DRAFT; HTGS_FULLTOP.
Rattus norvegicus (Norway rat)
Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (bases 1 to 202314)
                                                                                                                                                                                                                                                            936
                                                                                                                                                                                                                                                                                                                                                                                                                             995
                                                                                           876
                                                                                                                                                                             17405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AC132694/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
```

```
g
                                                                                                       ò
                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14099 GGAGAGATTCAAAAGGAGAAATACATCTTCGAACTGACTTGCCCTGTAACCTTTGGGACT 14040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14219 ATACAGGTATATACACATATGTATGTGTGTGTTGTTCATATAATTTCATACGATTTTA 14160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14159 ATTCTGCTTTTCTGAGCATCAGCCTCAGATCCTGTGTTAGGATTCAGCAATCAGGGGGAA 14100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13981 CCTICAAAGTAGATGAAAATAATCCTIC-ATGTTTCCTAAAATAGCAGGTCTTTGCATGA 13923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13922 AGTCAATTTTGATTTGTACTT---AAACTGTAATATGTTGTTAACAGTAATAACCATGGA 13866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13776 T-------AGGTTTTCAAGGCCATCAAGGCATTTTTT 13748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13633 Arrgarargacccarrarrccc-crracacaaaacaaraacararcraaarcccrcc 13575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14039 TAAAATTAATTATGAGTTG--GAAGAATACATCTAATATGAATATCAAAACCTGTAATG 13982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13865 AACCATTATCTTCTGAACAC------GTTACCTGTTTGGATATGGTAT 13823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13822 AAGTTATCTGAAGCAAGTTAGAAA------CAAGTCAGGCAGTGGGATAGAT 13777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13692 AAACCCAAGTACATATTCTAAGTCTGGTCTGTTTATTAAAAGTGAGTTTTATTAATT-TC 13634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATACTTAGCATTTATCAGGTCTAATGAAACCAATATTGAATCTCTGATAAATATTTTCT 1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            560 AATTACATTTGAGTTTAGAAACTAAACATAGCATTAATATGAATAATGCATGGAA 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATAGCTACATCCTATTATTCCCTTTTAGAAACAAGAATAACAATAAGTTTTAATAGTTGC 979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                262 ATATAGCTATATCTATGTATCTAACAGAGAAGTTCAAGTCACTTCA-ATTAAAGAA 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   321 ACATTTTTGAGCATGGGACCAGCCTCAGGTCTTATGCTGGGATGCAGTAGACA-GGAGAT 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGGAAATTAGAAAAGAGAACTGTGTAATTGAAATGACGTGGGGCTGCACCCTTAAGGAAC 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               740 ITTCTTGGCTTGTTGTATACCCATTGGCCAGGGCCTTTATAAGGACTCCCAAAAGCATTT 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    860 CAATCTATTIGGACGCTCAGGTTATGATATGTTTATGAAAAAAAAGCTTCATTATTTCTT 919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   800 TGAAGAATGGCAATATCAAATAAGTGTAFGTCCTCTCAAATGAGGCATTTTTAATTGTTA 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 680 AAGCCACTTCAAACAAGTTTCAAAATAAAGGAAGGTAGCAAGTTAGGCGATGGATTATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        440 TTATAATTAATGATGATGAATAAACATACCAGGATAAAGATGTCAAATGAGTGTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      500 CCCTTAAAGTAGATTAAAGTGTGCATTCTTTGTTTCCTAAAATATGATTTTACTGCTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATTATTATCCTTTTGAAAACTGATTGATAAATATTATTCCCCCTCCTTTAGAAACAGTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                       78; Gaps
                                                                                                                                                                                                                                                                                                                                                                            Query Match 5.9%; Score 96.2; DB 2; Length 202314; Best Local Similarity 55.7%; Pred. No. 5.3e-09; Matches 492; Conservative 0; Mismatches 313; Indels 78;
/organism="Rattus norvegicus"
/mo.l-type="genomic DNA"
(db Aref="taxon:10116"
/clone="CH230-490C22"
                                                                                                                                                                  .200007)
                                                                                                                                                                                                                                                                   201299. 202314
/note="wgs_end_extension
clone_end:T7"
                                                                                                                                                                                                                                                   sequence: BZ125806"
                                                                                                                                           /note="wgs_contig"
complement(199582..20
/note="clone_boundary
                                                                                 1. .2170
/note="wgs_contig"
2221. .3503
                                                                                                                                                                                                             clone_end:T7
                                                                              misc_feature
                                                                                                                         misc_feature
                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    දු දු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      යු දු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요. &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
```

Search completed: April 25, 2004, 18:58:14 Job time: 4272.17 secs

Title: Perfect score:

Sequence:

OM nucleic

on:

Run

Scoring table:

Searched:

Database

```
ALI06537 Drosophil
ALI065414 Drosophil
ALI08415 Drosophil
ALI08773 Drosophil
ALI08773 Drosophil
BM414951 Op20019 M
ALI14650 BX414650
BX414650 BX414650
BX414650 BX414650
BX461310 BX461310
BX350919 BX35939
BX350919 BX35939
BX350615 BX36015 BX360615
BX360615 BX360615
BX360615 BX360615
BX375239 BX35939
BX375239 BX35939
BX375239 BX35939
BX375239 BX35939
BX375239 BX35939
BX341173 BX316010
BX411173 BX411173
CA451621 AGENCOURT
BX4107260 Drosophil
BX34117 BX341977
BX1080 BX361080
CG74948 BX361080
CG74948 BX361080
BX361080 BX361080
BX361080 BX361080
BX385572 BX385572
ALI07239 Drosophil
BX385542 BX3610
BX385542 BX35642
BX35642 BX35642
BX35642 BX35642
BX356610 BX326810
BX356810 BX326810
BX31780 BX31180
BX318131 ALI38931
BX3618931 ALI38931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 286)
Dias Neto, E., García Correa, R., Verjovski-Almeida, S., Briones, M.R., Nagai, M.A., da Silva, W. Jr., Zago, M.A., Bordin, S., Costa, F.F., Goldman, G.H., Carvalho, A.F., Matsukuma, A., Baia, G.S., Simpson, D.H., Brunstein, A., deoliveira, P.S., Bucher, P., Jongeneel, C.V., O'Hare, M.J., Soares, F., Brehtani, R.R., Reis, L.F., de Souza, S.J. and Simpson, A.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AW838776 286 bp mRNA linear EST 18-MAY-2000 CM4-LT0057-140100-080-h05 LT0057 Homo sapiens CDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shotgun sequencing of the human transcriptome with ORF expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sequence tags
Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
20202663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ALIGNMENTS
                                                                                                                                                                                                                                                                                                                     CMS 0039R
BX375239
AZ077012
BM414967
CMS 00F86
BX111173
CA453621
CA453621
CMS 324367
CMS 343667
CMS 343667
CMS 343667
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS 343687
CMS
                                                                                  CE833588
CC80187R
BM414951
AL514901
BX414650
BX414650
CNS00391
CD387197
BX359398
BX359398
BX35015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AW838776.1 GI:7932750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                        1101
865
1201
1209
1209
1201
982
1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1101
1101
1101
1201
                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1
AWB38776/C
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       υυ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AW838776 CM4-LT005
AL060767 Drosophil
AL066537 Drosophil
AL063921 Drosophil
                                                                                                                        April 25, 2004, 07:00:48 ; Search time 1262.83 Seconds (without alignments) 16458.288 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Description
                                                                                                                                                                                                                                                          1 taaaatatctgataggcagt.....ttttgaaaaatataaaat
                                                                                                                                                                                                                                                                                                                                                                                                          55026578
    GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                           27513289 segs, 14931090276 residues
                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                     nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AW838776
CNS005TE
CNS00418
CNS0039G
                                                                                                                                                                                                                                                                                              IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      em gss mus:
em gss pro:
em gss rod:
em gss vrl:
gb gssl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          em_gss_hum:*
em_gss_inv:*
em_gss_pln:*
em_gss_vrt:*
em_gss_fun:*
em_gss_mam:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               em_estba:*
em_esthum:*
em_estin:*
em_estin:*
em_estpl:*
em_estpl:*
em_estpl:*
em_estpl:*
gb_est1:*
gb_est2:*
gb_est3:*
gb_est4:*
gb_est4:*
em_estfun:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0000
                                                                                                                                                                                                                  US-10-051-835-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gb_gss2:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 286
997
987
1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EST: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 37.7
9.7
8.8
8.8
```

262.4 67.6 61.2 55.4

0 0 0 0

Score

Result Š.

```
1. .997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96
                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                               /mol_type="marka"
/mol_type="marka"
/do xref="texon:9606"
/do xref="texon:9606"
/do zee="double"
/clone_lib="typo605"
/note="Organ: lelomios; Vector: puc18; Site_l: Smal;
Site_l: Smal; A mini-library was made by cloning products
Site_l: Smal; A mini-library was made by cloning products
derived from ORESTES PCR (U.S. Letters Patent application
No. 196,716 - Ludwig Institute for Cancer Research)
profiles into the pUC 18 vector. Reverse transcription of
tissue mRNA and CDNA amplification were performed under
low stringency conditions."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CNSO05TE 997 bp DNA linear GSS 03-JUN-1999
Drosophila melanogaster genome survey sequence TET3 end of BAC #
BACR12X22 of RPCI-98 library from Drosophila melanogaster (fruit
                               Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome roject. This notry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=&t2=CM4-LT0057-140 100-080-h05&t3=2000-01-14&t4=1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTAACAGATACTTCTCCATGGGATGGTAAAAGGAAGTTATTTCAATAAAATGACCCCTT 635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (02-JUN-1999) Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        47

    - Web : www.genoscope.cns.fr)
    Determination of this BAC-end sequence was carried out as part of

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTAACCAAAGAAACAACAAGTTTGGGAACATTCCTCTTCTGAAATATGAAAGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTAACCAAAGAAACAACAAGTTTGGGAACATTCCTCTCTTCTGAAATATGAAAGAGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTAACAGATACTTCTCCCATGGGATGGTAAAAGGAAGTTATTTCAATAAATGACCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     396 ATGAAAGAAAGGTGAGCACAGCCATTTCCTTTACAACAGAAATAACAGATTTCCCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGAAAGAAAGGTGAGCACAGCCATTTCCTTTACAACAGAAATAACAGATTTCCCAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Drosophila melanogaster (fruit fly)
Drosophila melanogaster
Eukaryota; Metaroa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 286;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 262.4; DB 10
Pred. No. 5.1e-42;
0; Mismatches 1
                                                                                                                                                                                                                   /organism="Homo sapiens"
                                                                                                                                           quality sequence start: 4
quality sequence stop: 286.
Location/Qualifiers
1..286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAAGGAGTTCAAAACAGGTTGCC 659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   fly), genomic survey sequence. AL060767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAAGGAGTTCAAAACAGGTTGCC 23
                                                                                                                     Seq primer: puc 18 forward
High quality sequence start
High quality sequence stop:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AL060767.1 GI:4943573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 37.7%;
Best Local Similarity 99.6%;
Matches 263; Conservative
Tel: +55-11-2704922
Fax: +55-11-2707001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CNS005TE/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                         DRIGIN
```

, d

ઠ

셤

ઠે

ò

g

ò

g

```
collaboration with the Berkeley Drosophila Genome Project (BDGP). The BDGP is constructing a physical map of the Drosophila melanogaster genome using these BAGs. For further information please see http://www.fruitily.org The BDGP Drosophila melanogaster BAC library was prepared by Kazutoyo Osoegawa and Aaron Mammoser in Pieter de Jong's laboratory in the Department of Cancer Genetics at the Roswell Park Cancer Institute in Buffalo, NY. The library is named RPCI-98 and was constructed by partial BCORI digestion of Drosophila DNA provided by the BDGP from the isogenic strain y2; cn bw sp, the same strain used for the BDGP's pl and EST libraries. A more detailed description of the library and how to order individual BAC clones, the entire library, or filters for hybridization from the BACPAC Resource Center can be found at http://bacpac.med.buffalo.edu/drosophila_bac.htm.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           336 AAAGGCCTTTTGGGAGGTGGCAGTGTGGGAAGTAGGGCTCCGGTTAGAATACATGG 395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       396 ATGAAAGAAAGGTGAGCACAGCCATTTCCTTTACAACAGAAATAACAGATTTCCCAGCCT 455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               : ::|:::| ::| ::| : brgcrrrgrrargrrargrraragrrrarrarraragarargrr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          332 NINNINANNNITITITITITITININNNITITINNNITITINNNITITANINNININNNITITINANA 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACATATTTAAGGACTGGGTAGAAAAAAAAGAGAGTATGAACAAGAGTGAGGAGATTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       216 AGCAGTGACCTTTGAGAGTACATCTCTAGAGTGGTATGTGTAGAGCCAGATTTTCAGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          576 GTAACAGAIACTICTCCAIGGGAIGGIAAAAAGGAAGITAITICAAIAAAAIGACCCCTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TAAATGAGATGATTCAGGAAAGAGTATAAACTGGGAAGAGAGACAGAGACAGGCTCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGAACCATCAAGCATTTTGGGGGTGGAAGGAAAGGAGCCATGAATCAAAAGGTGGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTAACCAAAGAAACAACAAGTTTGGGAACATTCCTCTTTCTGAAATATGAAAGAGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAACACAGGAGAGGCTTTGATGGCGATACAGACTTGGAAGACATCAGTGCTGAGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         536 GGAAGGAGTTCAAAACAGGTTGCCATATGCTTTATGTGGAGTTTTGAAAATATATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 29; Length 997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Drosophila melanogaster"
/mol_type="genomic DNA"
/db_xref="taxon:7227"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.0014;
-ham 346;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 9.7%; Score 67.6; Di
Best Local Similarity 17.2%; Pred. No. 0.000
Matches 113; Conservative 198; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone="BACR12K22"
/clone_lib="RPCI-98"
/note="end : TET3"
```

```
Direct Submission

Submitted (02-JUN-1999) Genoscope - Centre National de Sequencage:
BP 191 91006 EVRY cedex - FRANCE (E-mail: seqref@genoscope.cns.fr
- Web: www.genoscope.cns.fr)

- Web: www.genoscope.cns.fr)

- Determination of this BAC-end sequence was carried out as part of a collaboration with the Berkeley Drosophila Genome Project (BDGP).

The BDGP is constructing a physical map of the Drosophila melanogaster genome using these BACs. For further information please see http://www.fruitily.org The BDGP Drosophila melanogaster BAC library was prepared by Kazutoyo Gooegawa and Aaron Mammoser in Pieter de Jong's laboratory in the Department of Cancer Genetics at the Roswell Park Cancer Institute in Buffalo, NY. The library is named RPCI-98 and was constructed by partial EcoRI digestion of Drosophila DNA provided by the BDGP from the isogenic strain y2, cn bw sp, the same strain used for the BDGP's Pl and EST libraries. A more detailed description of the library and how to order individual BAC clones, the entire library, or filters for hybridization from the BACPAC Resource Center can be cound at http://bacpac.med.buffalo.edu/drosophila_bac.htm.
                                                                                                                                                        CNS0039G 1101 bp DNA linear GSS 03-JUN-1999
Drosophila melanogaster genome survey sequence TET3 end of BAC #
BACR08K10 of RPCI-98 library from Drosophila melanogaster (fruit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    193 TGAACAAGAGTGAGGAGATTATTAGCAGTGACCTTTGAGAGTACATCTCTAGAGTGGTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGTAGAGCCAGATTTTCAGCATCAGAACCATCAAGCATTTTGGGGGGTGGAAGAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         133 GAGGACAGAGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAAAACAAGAGAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13 TAGGCAGTTAGAAATTTGAGTTTGGAACACAGGAGAGAGGCTTTGATGGCGATACAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         73 TGGAAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGTATAAACTGGGAA
                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                    1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1101;
Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           melanogaster"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match

8.0%; Score 55.4; DB 29;
Best Local Similarity 16.2%; Pred. No. 0.37;
Matches 110; Conservative 284; Mismatches 284;
                                                                                                                                                                                                                                                                                                                         Drosophila melanogaster (fruit fly)
Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Drosophila me/mol_type="genomic DNA"
/db_xref="taxon:7227"
                                                                                                                                                                                                           fly), genomic survey sequence. AL063921
AL063921.1 GI:4941778
GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone lib="RPCI-98"
/note="end : TET3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genoscope.
Direct Submission
362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          861
                                                                                                              RESULT 4
CNS0039G/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                     Dismitted (02-JNN-1999) Genoscope - Centre National de Sequencage : Submitted (02-JNN-1999) Genoscope - Centre National de Sequencage : PRANCE (F-mail : seqref@genoscope.cns.fr - Web : www.genoscope.cns.fr |
Determination of this BAC-end sequence was carried out as part of collaboration with the Berkeley Drosophila Genome Project (BDGP). The BDCP is constructing a physical map of the Drosophila melanogaster genome using these BACs. For further information please see http://www.fruitfly.org The BDCP Drosophila melanogaster BAC library was prepared by Kazutcyo Oscegawa and Aaron Mammoser in Pieter de Jong's laboratory in the Department of Cancer Genetics at the Roswell Park Cancer Institute in Buffalo, NY. The library is named RPCI-98 and was constructed by partial Ecost digestion of Drosophila DNA provided by the BDGP from the isogenic strain v2: on bw sp, the same strain used for the BDGP's and how to order individual BAC clones, the entire library, or filters for hybridization from the BACPAC Resource Center can be found at http://bacpac.med.buffalo.edu/drosophila_bac.htm.
                      Drosophila melanogaster genome survey sequence TET3 end of BAC #BACRSO16 of RPCI-98 library from Drosophila melanogaster (fruit Aly), genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAGGAAAAGGAGCCATGAATCAAAAGGTGGGGAAAAAGGCCTTTTGGGAGGTGGCAGTGT 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAATATCTGATAGGCAGTTAGAAATTTGAGTTTGGAACACACAGGAGAGAGGCTTTGATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62 CGATACAGACTTGGAAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TAAACTGGGAAGAGGACAGGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGCAGTGACCTTTGAGAGTACATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAGAGTGGTATGTGTGTAGAGCCAGATTTTCAGCATCAGAACCATCAAGCATTTTGGGGGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                          Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neopera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 29; Length 987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Drosophila melanogaster"
/mol_type="genomic DNA"
/db_xref="taxon:7227"
/clone="BACR09C16"
/clone lib="RRCI 98"
/note="end : IET3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 8.8%; Score 61.2; DB 29; Similarity 22.0%; Pred. No. 0.027; 90; Conservative 136; Mismatches 184;
                                                                                                                                                                                                        Drosophila melanogaster (fruit fly)
                                                                                                                                                      AL066537.1 GI:4942778
GSS.
                                                                                                                                                                                                                                                                                                                                                                         Direct Submission
                                                                                                                                                                                                                                                                                                                                                     Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
               CNS00418/c
LOCUS
DEFINITION
                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
```

72

g ઠે ф ò 엄 δ g ò d ò

ઠે

921 252

ö

548

g ઠે ď ð g d

ò

g

ò

셤 Š

ò

```
1373 bp DNA linear GSS 26-JUL-1999
Drosophila melanogaster genome survey sequence SP6 end of BAC
BACNIS113 of DrosBAC library from Drosophila melanogaster (fruit
11y), genomic survey sequence.
Ali06237
Ali06237.1 GI:5620820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (13-JUL-1999) Genoscope - Centre National de Sequencage : Bp 1919 91006 ENVEX cedex - FRANCE (E-mail : segref@genoscope.cns.fr. Web : www.genoscope.cns.fr.)
Determination of this BAC-end sequence was carried out as part of eachlaboration with the BAC-end sequence was carried out as part of a collaboration with the BAC-end sequence was carried out as part of a http://www.edgp.ebi.ac.uk - . This Drosophila Genome Project (EDCP) - http://www.edgp.ebi.ac.uk - . This Drosophila melanogaster BAC library (Bros BAC) was made by Alain Billaud at CEPH (Centre Jruden Polymorphisme Humain) with funding provided by a MRC project grant. The DNA was prepared from embryos by Alain Bucheton and Genevieve Payan. It has been constructed in the vector
                                                                                                                                                                                                                                                                                  TGGGGAAAAGGCCTTTTTGGGAGGTGGCAGTGTGGGTAGGGAGTAGGGCTCCGGTTAGAAT 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           150 TCAAGGAACATATTTAAGGACTGGGTAGAAAAACAAGAGAGTATGAACAAGAGAG
                                                                                                                90 GAGCAGTAAATGAGATGAGATTCAGGAAAGAGTATAAACTGGGAAGAGGACAGAGAGACAGGGC
                                                                                                                                                                                                    210 ATTATTAGCAGTGACCTTTGAGAGTACATCTCTAGAGTGGTATGTGTAGAGCCAGATTTT
                                                                                                                                                                                                                                                                                                                                                            CAGCATCAGAACCATCAAGCATTTTGGGGGTGGAAGGAAAAGGAGCCATGAATCAAAAGG
                                                                               GAGTTTGGAACACAGGAGAGAGGCTTTGATGGCGATACAGACTTGGAAGACATCAGTGCT
                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Drosophila melanogaster (fruit fly)
Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ebydroidea; Drosophilidae; Drosophila.
                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1373;
    Length 846;
                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      melanogaster"
Score 54.8; DB 28;
Pred. No. 0.51;
0; Mismatches 208;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .1373
/organism="Drosophila mel
/nol_type="genomic DNA"
/db Xref="texon:7227"
/clone="BACN15113"
/plasmid="pBeloBAC11"
/note="end:SP6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 50.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       390 ACATGGATGAAAGAAGGTGAGCA 413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       caacdagagarcgaadgadga 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
    7.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7.3%;
                                         176; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Direct Submission
                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          pBeloBAC11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Genoscope
  Query Match
Best Local S:
Matches 176
                                                                                                                                                                                                                                                                                                                                                                                                       270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       330
                                                                                                                      787
                                                                                                                                                                                                                                                                                                                                                                607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 6
CNS01637
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                      쉽
                                                                                                                                                           ò
                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                            \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B18548 1408-Sp6 TAMU Arabidopsis thaliana genomic clone T408, genomic
                                                                                                                                                                                                                                                                                                                                               612
                     AGCCATGAATCAAAAGGTGGGGAAAAGGCCTTTTTGGGAGGTGGCAGTGGGGTAGGGAGT 372
                                             DRKRADDKRDAADDRDDAATWITHITIRDIDDWKWKIDIWIRWAADRIWDEDDED 742
                                                                                                     432
                                                                                                                                            682
                                                                                                                                                                                   492
                                                                                                                                                                                                                          622
                                                                                                                                                                                                                                                                 552
                                                                                                                                                                                                                                                                                                        295
                                                                                                                                                                                                                                                                                                                                                                                     502
                                                                                                                                                                                                                                                                                                                                                                                                                            672
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryoča, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta, Spermatophyta, Magnoliophyta, eudicotyledons, core eudicots, rosids, eurosids II, Brassicales, Brassicaceae, Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (bases 1 to 846) eng, L., Li,Y., Shinn,P., Sun,H. and eng,J., Dewar,K., Buehler,E., Kim,C., Li,Y., Shinn,P., Sun,H. and
                                                                                                                         AGAAATAACAGATTTCCCAGCCTCTAACCAAAGAAACAACAAGTTTGGGAACATTCCTCT
                                                                                                                                                                                                         621 AKWDWKTRADRWDRWAADTWTDARKADRDWAKARAWRARRDRARAARADRRWTTKGKTTT
                                                                                                                                                                                                                                                                                                                                            553 GAAAAAAAAAAACAGCCCAAGTGTAACAGATACTTCTCCCATGGGATGGTAAAAAGGAAG
                                                                                                                                                                                                                                                                                                                                                                                   Unpublished (1997)
Contact: Ecker J.
Arabidopsis Thaliana Genome Center
University of Pennsylvania
Dept. of Biology, University of Pennsylvania, Philadelphia, PA
19104
                                                                                                   AGGGCTCCGGTTAGAATACATGGATGAAAGAAAGATGAGCTGAGCCACTTTCCTTTACAAC
                                                                                                                                                                                                                                                               493 CTTCTGAAATATGAAAGAGGGGGTAAATACTGGAGTAGGATTGTGAAAAAGTCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                            TTATTTCAATAAAATGACCCCTTGGAAGGAGTTCAAAACAGGTTGCCATATGTTATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone lib="mawu"
/note="Vector: BeloBACII; Site_1: HindIII; Site_2:
HindIII; Produced by Rod Wing"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Arabidopsis thaliana"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tel: 215-898-9384
Fax: 215-898-8780
Email: jecker@atgenome.bio.upenn.edu
Seg primer: Sp6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Arabidopsis thaliana (thale cress)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              High quality sequence start: 116
High quality sequence stop: 136.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="genomic_DNA"
/strain="Columbia"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             db_xref="taxon:3702"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /sex="hermaphrodite"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BAC End Sequences at ATGC
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  673 GGAGTTTTGAAAAATATAT 691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone="T408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B18548.1 GI:2316452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              survey sequence.
B18548
                     313
                                                            801
                                                                                                   373
                                                                                                                                                                                   433
                                                                                                                                                                                                                        681
                                                                                                                                                                                                                                                                                                                                                                                                                            613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 5
B18548/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
```

Ĥ

7

Length 1101;

919

180

736

916

136

g Š ద $\dot{\delta}$ d à

g ઠે d ò 원 상

```
Drosophila melanogaster genome survey sequence SP6 end of BAC BACN37110 of DrosBAC library from Drosophila melanogaster (fruit ALIV), genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            977 AKATDGKDTWRDTTDTAKRRRRRRRRAGRGRDRKGDKKKRWRARWRKGKKKKKTKDKDDD 1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (23-JUL-1999) Genoscope - Centre National de Sequencage : BP 191 91006 EVRA cedex - FRANCE (E-mail : seqref@genoscope.cns.fr - Web : www.genoscope.cns.fr )
Determination of this BAC-end sequence was carried out as part of scollaboration of this BAC-end sequence was carried out as part of scollaboration with the Buropean Drosophila Genome Project (EDGP) - http://www.edgp.ebi.ac.uk - This Drosophila melanogaster BAC library (Dros BAC) was made by Alain Billaud at CEPH (Centre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 AACAAGAGAGTATGAACAAG--AGTGAGGAGATTATTAGCAGTGACCTTTGAGAGTACAT 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | :::: ::| | | | ::: : | ::| :: | ::| ::| :: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | ::: | :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            : ::|:| | ::::|:| : :|::|
797 GDGDRGDGGAGGGDRDRDARRARWENDTKDTRGAKDKADKKKKAGRKRKWWTRKTWKRDTA 856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             299 GTGGAAGGAAAAGGAGCCATGAATCAAAAGGTGGGGAAAAAGGCCTTTTGGGAGGTGGCAG 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           857 DWKAWAAWRWEWERDEKDERGREDEWERWEGADKGWKWDDDDTAKDDWTXKOTDWTAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               557 TAAWYTTTTTWTATTTWKAANAAAAWAAAAAAAAAAAAAAAAAGARGATNDDKBAKDWKA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              239 CTCTAGAGTGGTATGTGTAGAGCCAGATTTTCAGCATCAGAACCATCAAGCATTTTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 GCGATACAGACTTGGAAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGT
                                                                                                                                                                                                                                                                                                                                                     1 TAAAATATCTGATAGGCAGTTAGAATTTGAGTTTGGAACACAGGAGAGAGGCCTTTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 ATAAACTGGGAAGAGGACAGACAGGCTCAAGGAACATATTAAGGACTGGGTAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | : :: :| :: :| :: :| | : : : :| :: | :: | :: | :: | :: | :: | :: | :: | :: | :: | :: | :: | :: | :: | :: | ::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   419 ATTTCCTTTACAACAGAAATAACAGATTTCCCAGCCTCTAACCAAAGAAACAAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   479 GGGAACATTCCTCTCTCTGAAATATGAAAGAGGGGATAAATACTGGAGTAGGATTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Drosophila melanogaster (fruit fly)
Drosophila melanogaster
Eukaryota; Merazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                   8; DB 29;
4.7;
                                                                                                                                                                                                                                                                   Conservative 227; Mismatches 226;
                                                                                                                                                                                 7.2%; Score 49.8;
16.5%; Pred. No. 4.
             /clone_lib="RPCI-98"
/note="end : TET3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AL108415.1 GI:5628719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1097 KAKAA 1101
                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                539 GAAAA 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Genoscope
                                                                                                                                                                                                                                                               :06
                                                                                                                                                                             Query Match
Best Local S:
Matches 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 8
CNS017RP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (02-UTM-1999) Genoscope - Centre National de Sequencage : Submitted (02-UTM-1999) Genoscope - Centre National de Sequencage : Web : www.genoscope.cns.fr - Web : www.genoscope.cns.fr - Web : www.genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr - Genoscope.cns.fr -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Drosophila melanogaster genome survey sequence TET3 end of BAC #BACR1016 of RPCI-98 library from Drosophila melanogaster (fruit AL065414 AL065414 GI:4938827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         76 AAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGTATAAACTGGGAAGAG 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            196 ACAAGAGTGAGGAGATTATTAGCAGTGACCTTTGAGAGTACATCTCTAGAGTGGTATGTG 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    316 CATGAATCAAAAGGTGGGGAAAAAGGCCTTTTGGGAGGTGGCAGTGGGGAGTAGGGAGTAGG 375
                                                                                                                               16 GCAGTTAGAAATTTGAGTTTGGAACACAGGAGGAGGGCTTTGATGGCGATACAGACTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Drosophila melanogaster (fruit fly)
Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
                                                      ö
30.1%; Pred. No. 2.9; artive 84; Mismatches 193; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Drosophila melanogaster"
|mol_type="genomic DNA"
|dD_xref="taxon:7227"
|clone="BACRO1J16"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1275 TAGADAGARWAAAAXDAGWGTGAGAGWRWGKDGAG 1310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                376 GCTCCGGTTAGAATACATGGATGAAAGAAGGTGAG 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                  119; Conservative
    Best Local Similarity
Matches 119; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GSS.
```

RESULT 7 CNS000D1 LOCUS DEFINITION

ORGANISM ACCESSION VERSION KEYWORDS SOURCE

AUTHORS TITLE JOURNAL REFERENCE

COMMENT

,~

ø

SOUTHOR

FEATURES

```
Class: shotgun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CE833588.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CE833588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14512627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CE833588/c
LOCUS
DEFINITION
     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ਨੇ
                                                                                                                                                                                                                                                                                                     ₽
                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Drosophila melanogaster genome survey sequence SP6 end of BACL BACN37P10 of DrosBAC library from Drosophila melanogaster (fruit AL19), genomic survey sequence.

AL108773.1 GI:5629077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (23-ULI-1999) Genoscope - Centre National de Sequencage : Submitted (23-ULI-1999) Genoscope - Centre National de Sequencage : BP 191 91006 EVRY cedex - FRANCE (B-mail : seqrefégenoscope.cns.fr Determination of this BAC-end sequence was carried out as part of a collaboration with the European Drosophila Genome Project (EDGP) - http://www.edgp.ebi.ac.uk -. This Drosophila melanogaster BAC http://www.edgp.ebi.ac.uk -. This Drosophila melanogaster BAC d'Etude du Polymorphisme Humain) with funding provided by a MRC project grant. The DNA was prepared from embryos by Alain Bucheton and Genevieve Payan. It has been constructed in the vector
d'Etude du Polymorphisme Humain) with funding provided by a MRC
project grant. The DNA was prepared from embryos by Alain Bucheton
and Genevieve Payan. It has been constructed in the vector
pBeloBAC11.
                                                                                                                                                                                                                                                                                                                                         TCAGTGCTGAGGAGAAATGAGATGATTCAGGAAAAGAGTATAAACTGGGAAGAGAGACAGA 141
                                                                                                                                                                                                                                                                                                                                                                                                             201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             202 GTGAGGAGATTATTAGCAGTGACCTTTGAGAGTACATCTCTAGAGTGGTATGTGTAGAGC 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                     22 AGAAATTTGAGTTTGGAACACAGGAGAGGCTTTGATGGCGATACAGACTTGGAAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAAAACAAGAGAGTATGAACAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCAAAAGGTGGGGAAAAGGCCTTTTGGGAGGTGGCAGTGTGGGTAGGGAGTAGGG 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Drosophila melanogaster (fruit fly)
Drosophila melanogaster
Bukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                     Length 1101;
                                                                                                                                                                                                                                                                                     Indels
                                                                                                    melanogaster"
                                                                                                                                                                                                                                                 th 7.1%; Score 49.4; DB 29; Similarity 25.1%; Pred. No. 5.7; 89; Conservative 100; Mismatches 166;
                                                                                                               /mol_type="genomic DNA"
/db_xref="taxon:7227"
/clone="BACN3110"
/clone lib="brosBAC"
/plasmid="pseloBAC11"
/note="end : SP6"
                                                                                    1. .1101
/organism="Drosophila
                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Direct Submission
                                                                                                                                                                                                                                                                 Best Local Similarity
Matches 89; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pBeloBAC11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genoscope
                                                                                                                                                                                                                                                                                                                                                    742
                                                                                                                                                                                                                                                                                                                                                                                      82
                                                                                                                                                                                                                                                                                                                                                                                                                                                      142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           322
                                                                                                                                                                                                                                                   Query Match
                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 9
CNS0181N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                               임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                   \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                     ò
```

```
Ligr-gss-dog-17000332299120 Dog Library Canis familiaris genomic, CER316R8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  954 GAGARRGRGGRGGGGGGGGGGGGGGGRRRRRAARRGARRRAAGRARARARARARA 1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Kirkness EF
The Institute for Genomic Research
Department of Eukaryotic
Rockville, MD 20850, UsA
Rockville, MD 20850, UsA
                                                                                                                                                                                                                                                                                                                                                                                                                              221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          282 CATCAAGCATTTTGGGGGTGGAAAGGAAGCAGCCATGAATCAAAAGGTGGGGGAAAAAGGC 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            222 GACCTTTGAGAGTACATCTCTAGAGTGGTATGTGTAGAGCCAGATTTTCAGCATCAGAAC 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  342 CTTTTGGGAGGTGGCAGTGGGGTAGGGAGTAGGGCTCCGGTTAGAATACATGGATGAAA 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Carnivora, Fissipedia, Canidae, Canis. I toses 1 to 60. Kirkness, E.F., Bafna, V., Halpern, A.L., Levy, S., Remington, K., Rusch, D.B., Delcher, A.L., Pop, M., Wang, W., Fraser, C.M. and
                                                                                                                                                                                                                                                                                                                                                              162 TTTAAGGACTGGGTAGAAAAAAAGAGGAGTATGAACAAGAGAGGAGGAGATTATTAGCAGT
                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The dog genome: survey sequencing and comparative analysis
Science 301 (5641), 1898-1903 (2003)
                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                         Length 1101;
                                                                                                                                                                                                                                                                                    Indels
1. .1101
/organism="Drosophila melanogaster"
/organism="Drosophila melanogaster"
/db xref="taxon:727"
/clone="BACN37P10"
/clone=lbb-"DrosBAC"
/plasmid="pseloBAC11"
/note="end : SP6"
                                                                                                                                                                                                                                         DB 29;
                                                                                                                                                                                                                                       Query Match 7.0%; Score 48.6; DB 29; Best Local Similarity 22.2%; Pred. No. 8.2; Matches 70; Conservative 105; Mismatches 140;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .687
/organism="Canis familiaris"
/mol type="genomic DNA"
/strain="Standard Poodle"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /db_xref="taxon:9615"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: ekirknes@tigr.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GI:37174608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1074 ARRGGRRGGARRR 1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Canis familiaris (dog)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                402 GAAAGGTGAGCACAG 416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tel: 301-838-0200
Fax: 301-838-0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Canis familiaris
```

us-10-051-835-14.rst

ò g

유

g ò

ò

```
/organism="Globodera pallida"
/organism="Mixed"
/db_xref="maxNA"
/db_xref="taxon:3609"
/clone_lib="Mixed Stage EST's from Globodera pallida, the posts of prosts nematode"
/notes-"Vector: lambda GT11; This is a collaborative effort between IACR-Rothamsted and North Carolina State
University. The library was constructed from mixed stage
G. pallida in lambda GT11 by Paul Burroughs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EST 28-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Globodera pallida
Globodera pallida
Globodera pallida
Gubaryota; Metazoa; Nematoda; Chromadorea; Tylenchina;
Tylenchoidea; Heteroderidae; Heteroderinae; Globodera.
1 (bases 1 to 1478)
Heer, J., Sosinaki, B., Pokrzywa, R.M., Warry, A. and Opperman, C.
Mixed Stage EST's from Globodera pallida, the potato cyst nematode
Unpublished (2001)
                                                                                                                                                           |:|: :| :|: |: |: : :|| : :|| : :|| : :|| : :|| : : :| : : : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : : :|| : :|| : :|| : :|| : :|| : : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| : :|| :
                                                                                                                                                                                                                                                                                     579 ACAGATACTICTCCATGGGATGGTAAAAAGGAAGTTATTTCAATAAAATGACCCCTTGGA 638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BM414951
OP20019 Mixed Stage EST's from Globodera pallida, the potato cyst
nematode Globodera pallida cDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                639 AGGAGITCAAAACAGGITGCCATAIGCITTAIGTGGAGITTITGAAAAAIATATAAAAA 695
                                                                                                                                                                                                                                                                                                                                                                                                                  287 WARAAWTRGAWWAMRAAWAAANRAARMAWAAAWAWAAAAA 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ggggtggaaggaaaaggagccatgaatcaaaaggtggggaaaaaggccttttgggaaggtgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    176 AGAAAAACAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGCAGTGACCTTTGAGAGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          116 AGAGTATAAACTGGGAAGAGACAGAGACAGGCTCAAGGAACATATTAAGGACTGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATCTCTAGAGTGGTATGTAGAGCCAGATTTTCAGCATCAGAACCATCAAGCATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       640 CCNNNNAAAAAANNNNTTTTTCAGGGATTTTTTTTTTTAAAAGGNGAGAGAAGAG
                                     459 ACCAAAGAAACAACAAGTTTGGGAACATTCCTCTTCTGAAATATGAAAGAGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 12; Length 1478;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Opperman, C
Center for the Biology of Nematode Parasitism
NC State University; IACR-Rothamsted
Campus Box 7616; Raleigh, NC 27695, USA
Fax: 919.515.6699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6.9%; Score 47.8; DB 12;
ilarity 40.4%; Pred. No. 11;
Conservative 0; Mismatches 196;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: warthog@unity.ncsu.edu
GT11-10PCN F B08_GT11-10 F 061.ab1.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BM414951
BM414951.1 GI:18381182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 133;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
BM414951/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                셤
                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                          ò
                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (23-JUL-1999) Genoscope - Centre National de Sequencage: BP 191 91006 EVRY cedex - FRANCE (E-mail : segref@genoscope.cns.fr - Web : www.genoscope.cns.fr)
Determination of this BAC-nase and carried out as part of a collaboration with the Buropean Drosophila Genome Project (EDGP) - http://www.edgp.ebi.ac.uk -. This Drosophila melanogaster BAC library (Dros BAC) was made by Alain Billand at CEPH (Centre d'Etde du Polymorphisme Humain) with funding provided by a MRC project grant. The DNA was prepared from embryos by Alain Bucheton and Genevieve Payan. It has been constructed in the vector
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CNS0187R 878 bp DNA linear GSS 26-JUL-1999
Drosophila melanogaster genome survey sequence SP6 end of BAC
BACN04E04 of DrosBAC library from Drosophila melanogaster (fruit
                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   : | | | : : : | | | : : : | | | : : : | | | 106
                                                                                                                                                                                                                                                                                        433 AGABATAACAGATTTCCCAGCCTCTAACCAAGAACAACAAGATTGGGAACATTCCTCT 492
                                                                                                                                                                                                                                                                                                                                                                                                                     552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               595 CTGATGAAGAAAAATTAAGGGTCTTTACTAATAGACCAGGTATGAGAAAAGAGAAAAGA 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               553 GAAAAAAAAAAGAACCCCAAGTGTAACAGATACTTCTCCATGGGATGGTAAAAAGGAAG 612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            535 AAGAAAAGAGAAAAGGAAGGATGATTCTAATATTTTTGACCTGAGCAACTGGAAGAAT 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 399 AAAGAAAGGTGAGCACACATTTCCTTTACAACAGAAATAACAGATTTCCCAGCCTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                     CTTCTGAAATATGAAAGAGAGGGGATAAATACTGGAGTAGGATTGTGAAAAAAGTCAAGA
                                                                                                                                                                                                                                                                                                                                                  <u>aaacaggacagcriricrerrcccrigaccaagaraaaggaargcrigagaaggaarcri</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Drosophila melanogaster (fruit fly)
Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
                                                                                                                                                                                                                               Gaps
      /clone_lib="Dog_Library"
/note="Site_1: BstXI; Libraries were prepared from
peripheral blood"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 29; Length 878;
                                                                                                                                                              Length 687;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .878
/organism="Drosophila melanogaster"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6.9%; Score 48.2; DB 29;
25.9%; Pred. No. 10;
:ive 86; Mismatches 134;
                                                                                                                                                                                                                           93;
                                                                                                                                                              DB 29;
                                                                                                                                                                                             Pred. No. 11;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="genomic DNA"
/db_xref="taxon:7227"
/clone="BACN04E04"
/clone lib="brosBAC"
/plasmid="pelobAC11"
/note="end : SP6"
                                                                                                                                                              Score 48.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               fly), genomic survey sequence, AL108993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            613 TTATTTCAATAAAATGA 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAATTCCATTACTGA 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AL108993.1 GI:5629297
                                                                                                                                                              6.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6.9%
Best Local Similarity 25.9%
Matches 77; Conservative
                                                                                                                                                                                             Best Local Similarity 52.8
Matches 104; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genoscope.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          pBeloBAC11
                                                                                                                                                                                                                                                                                                                                                     655
                                                                                                                                                                                                                                                                                                                                                                                                                     493
                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 11
CNS0187R
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
```

641

355

Dp

ò

ð

```
/tissue type="THYMUS" /clone lib="Homo sapiens THYMUS" /clone lib="Homo sapiens THYMUS" /note="Vector: pCMYSPORT 6; lst strand cDNA was primed with a Not1-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and ECORY sites of the pCMVSPORT 6 vector.
                                                                                                                                                                                                                                                                                                  BX414650 Homo sapiens THYMUS Homo sapiens cDNA clone CSOCAPOO1TNO2 3-PRIME, MRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241 CTAGAGTGGTATGTGTAGAGCCAGATTTTCAGCATCAGAACCATCAAGCATTTTGGGGGT 300
248 AWATWWAAATWTAATTATTTAAWARTCTTTCCAAMTTTTCAWAAWTTTWATRAAAAAA 189
                                               624 AAAIGACCCCITGGAAGGAGITCAAAACAGGITGCCATATGCTTTATGTGGAGTTTTGAA 683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

    (bases 1 to 994)

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 TAAAATATCTGATAGGCAGTTAGAAATTTGAGTTTGGAACACAGGAGAGAGGCTTTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 GCGATACAGACTTGGAAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 AACAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGCAGTGACCTTTGAGAGTACATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 ATAAACTGGGAAGAGGACAGAGACAGGCTCAAGGAACATATTAAGGACTGGGTAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genoscope. Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 6015.f
Contact: Feng Liang Email: fliang@lifetech.com UKL:
http://fulllength.invitrogen.com/ InvitroGen.Corporation 1600
Faraday Avenue Genoscope sequence ID: CSOCAP001DG01NP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6.8%; Score 47.6; DB 13; Length llarity 19.8%; Pred. No. 13; Conservative 145; Mismatches 188; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Li,W.B., Gruber,C., Jessee,J. and Polayes,D. Full-length CDNA libraries and normalization Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Library was not normalized.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CSOCAP001YN02"
                                                                                                                                                                                                                                                                                                                                                                                                BX414650.1 GI:30763455
                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
Homo sapiens
                                                                                                                                             684 AAATATATAAA 695
                                                                                                                                                                                       188 AAMTTWMAAAAA 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 82, Conserva
                                                                                                                                                                                                                                                               RESULT 14
BX414650/c
                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                         ద
                                                                                                                                             ò
                                                                                                                                                                                     원
                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_cype="mana"
/db xref="texon:9606"
/db xref="texon:9606"
/clone="lb="texon:9606"
/clone="lb="thomo sapiens NETROBLASTOWA"
/note="Vector: powySport 6; 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and scorv sites of the pCMVSPORT 6 vector. Library was not normalized."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                            AL514901 ALC SAPIEDS PD MRNA linear EST 08-MAY-2003 AL514901 Homo sapiens NEUROBLASTOMA Homo sapiens cDNA clone CLOBB012ZH12 3-PRIME, MRNA sequence.
                                                      415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INGAATACATGGATGAAAGAAAGGTGAGCACAGCCATTTTCCTTTACAACAGAAATAACAG 443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTICCCAGCCICIPAACCAAGAACAACAAGAITIGGGAACATICCICICITCTGAAAIA 503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            з68 кадамаадамимтилилаамдамдаталадагалалалаладамдадтталалалаламмм 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACAGCCCAAGTGTAACAGATACTTCTCCATGGGATGGTAAAAAGGAAGTTATTCAATA 623
                                                                                                   461
            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo. 1 (bases 1 to 932)
Li,W.B., Gruber, C., Jessee, J. and Polayes, D.
Li,W.B., Gruber, C., Jessee, J. and Polayes, D.
Unpublished (2001)
On Peb 13, 2001 this sequence version replaced gi:12778394.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: sequefogenoscope.cns.fr, Web : www.genoscope.cns.fr library was constructed by Life Technologies, a division of Inbrary was constructed by Life Technologies, a division of Invitrogen. This sequence belongs to sequence cluster 4052.r For more information about this cluster, see thitps://www.genoscope.cns.fr/
cgi-bin/cluster.cg/?seq-cLi0BB012ZH12FP1&cluster=4052.r. Contact : Feng Liang Email : fliang@lifetech.com URL : http://fulllength.invitrogen.com/ InvitroGen Corporation 1600 Faraday Avenue Genoscope sequence ID : CL0BB012ZH12FP1.
                                                      520 GGGGBAGGANNGGGGAGGGNANGAGAGAGAGNAANNGGNNAGAAAAGAGGGNGNNNAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 9; Length 932;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6.8%; Score 47.6; DB 9; Length 9 36.2%; Pred. No. 13; tive 45; Mismatches 154; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
                                                                                                                                               416 GCCATTTCCTTTACAACAGAATAACAGA 444
                                                                                                                                                                                         460 GGNANAGAAAGAANGNNAAAAAAAAAAA 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                       AL514901.2 GI:30464786
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       al Similarity 36.2
113, Conservative
                                                                                                                                                                                                                                                                                                                                                                                 AL514901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S:
Matches 113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           564
                                                                                                                                                                                                                                                               RESULT 13
ALS14901/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
```

ö

셤

à

ద

ઠ

g à

δ

581 WAAATTKKTKKTKKTWKTKKKTTTTTRDTWDAARARRRRRRRRRRRRRRRRRGGRRRR 522

us-10-051-835-14.rst

```
ઠે
                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="mRNA"
/mol_type="mRNA"
/dobs_rcef=taxon:9606"
/clone="CSOPFO25YA16"
/fissue_type="FETAL BRAIN"
/dev stage="fetal"
/clone lib="Homo sapiens FETAL BRAIN"
/note=Torgan: brain; Vector: pCMVSPORT 6; 1st strand cDNA
was primed with a Not1-oligo(dT) primer. Five prime end
enriched, double-strand cDNA was digested with Not I and
cloned into the Not I and EcoRV sites of the pCMVSPORT 6
vector. Library was not normalized."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1201 bp mRNA linear EST 22-MAY-2003
BX461310 Homo sapiens FETAL BRAIN Homo sapiens cDNA clone
CSODF025XA16 5-PRIME, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genosco: General National de Sequencage
Genoscope - Centre National de Sequencage
BP 191 91006 EYRY cedex - France
BB 191 91006 EYRY cedex - France
BB 191 91006 EYRY cedex - France
Library was constructed by Life Technologies, a division of
Invitrogen. Contact : Feng Liang Email : fliang@lifetech.com URL :
http://fulllength.invitrogen.com/ Invitrogen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSODF025BA08QP1.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300 TGGAAGGAAAAGGAGCCATGAATCAAAAGGTGGGGAAAAGGCCTTTTGGGAAGTGGCAGT 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420 ITTCCTTTACAACAGAAATAACAGATTTCCCAGCCTCTAACCAAAGAAACAACAAGTTTG 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480 GGAACATTCCTCTTCTGAAATATGAAAGAGAGGGGATAAATACTGGAGTAGGATTGTG 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAAAGTCAAGAGAAAAAAAAAAAAGAACAGCCCAAGTGTAACAGATACTTCTCCATGGGAT 599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301 GGAAGGAAAAGGAGCCATGAATCAAAAGGTGGGGAAAAAGGCCTTTTGGGAGGTGGCAGTG 360
                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.

1 (bases 1 to 1201)

1 (Jases 1 to 1201)

Full.Length cDNA libraries and normalization

Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Gaps
                                                                                     Query Match 6.8%; Score 47.4; DB 13; Length 1201; Best Local Similarity 22.6%; Pred. No. 14; Matches 74; Conservative 117; Mismatches 136; Indels 0;
                                                                                                                                                                                                                                                                                                   BX461310
BX461310.1 GI:31031291
                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                       LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                              RESULT 15
BX461310
                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                               a
                                                                                       δ
                                                                                                                         원
        ò
```

```
1131 KKKAAAAAAAAAAAKKKAAA 1157
                               600 GGTAAAAGGAAGTTATTTCAATAAA 626
       음
```

Search completed: April 26, 2004, 01:59:16 Job time : 1266.83 secs

Sequence Sequence Sequence

Н

Sequence 120814, Sequence 120814, Sequence 11, Appli Sequence 11, Appli Sequence 1388, App Sequence 12438, App Sequence 12438, A Sequence 12438, A Sequence 12438, A Sequence 12438, A Sequence 12438, A Sequence 12438, A Sequence 12438, A Sequence 12438, A Sequence 12438, A Sequence 12438, A Sequence 12438, A Sequence 12438, A Sequence 161, App Sequence 161, App Sequence 161, App Sequence 161, App

161, App 1167, Ap 261595, 261595,

Sequence Sequence Sequence Sequence Sequence Sequence Sequence

51, Appl 53, Appl 1006, Ap 67, Appl

Sequence Sequence Sequence Sequence Sequence

Sequence Sequence

```
GCGATACAGACTTGGAAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 ATAAACTGGGAAGAGGACAGAGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 ATABACTGGGAAGAGACAGAGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAAAATATCTGATAGGCAGTTAGAAATTTGAGTTTGGAACACAGGGAGAGAGGCTTTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 TAAAATATCTGATAGGCAGTTAGAAATTTGAGTTTGGAACACACAGGAGAGAGGCTTTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 GCGATACAGACTTGGAAGACATCAGTGCTGAGCAGTAAATGAGATGAGATGCAGGAAAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Publication No. US20030165864A1

Sublication No. US20030165864A1

GENERAL INPORMATION:
GENERAL INPORMATION:
GENERAL INPORMATION:
APPLICANT: Lasek, Amy W.
TITLE OF INVENTION: GENES REGULATED BY DNA METHYLATION IN TUMOR CELLS
FILE REFERENCE: PA-0044 US
CURRENT APPLICATION NUMBER: US/10/051,835
CURRENT PILING DATE: 2002-01-16
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PERL PROGram
SEQ ID NO 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc_feature
OTHER INFORMATĪON: Incyte ID No. US20030165864Al 213413.1
15 US-10-240-452-4
16 US-10-027-632-136545
16 US-10-027-632-136545
11 US-10-027-632-136645
11 US-10-027-632-120814
11 US-10-027-632-120814
12 US-10-027-632-120814
13 US-10-212-841-1
13 US-10-312-841-1
14 US-10-312-841-1
15 US-10-312-841-1
16 US-10-312-841-1
17 US-10-312-841-1
18 US-10-27-632-12438
11 US-10-027-632-12438
11 US-10-27-632-12438
11 US-10-27-632-12438
12 US-10-27-632-1267
13 US-10-27-632-1267
14 US-10-27-632-167
15 US-10-27-632-167
15 US-10-27-632-167
17 US-10-27-166-124
18 US-10-27-166-124
19 US-10-27-166-124
19 US-10-27-166-124
11 US-10-27-166-124
11 US-10-27-166-124
12 US-10-052-4883
13 US-10-257-166-134
14 US-10-257-166-134
15 US-10-257-166-134
17 US-10-257-166-134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 696; DB 15;
100.0%; Pred. No. 7.3e-187;
ative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.0
Matches 696; Conservative
                                                                                                                3673778
                                                                                                                                                                                                                                             1686
2054
14861
14861
610
610
                                                                                                                                                                                                                                                                                                                                                                                                                                 9539
14798
96593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Homo sapiens
       US-10-051-835-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JS-10-051-835-14
                                                           .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 14, Appl Sequence 1724, A Sequence 268, App Sequence 18511, A Sequence 1669, App Sequence 346, App Sequence 15537, Sequence 153507, Sequence 1516, App Sequence 153507, Sequence 1516, App Sequence 1616, App Sequence 1616, App Sequence 1616, App Sequence 1616, App Sequence 1616, App Sequence 1616, App Sequence 1616, App Sequence 1616, App Sequence 1616, App Sequence 1616, App Sequence 128, App
                                                                                                                            April 25, 2004, 07:43:48; Search time 203.468 Seconds (without alignments) 15422.560 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                     US-10-051-835-14
696
1 taaaatatctgataggcagt......ttttgaaaaatatataaaat 696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cgn2_6/ptodata/2/pubpna/USO7_PUBCOMB.seq:*

cgn2_6/ptodata/2/pubpna/DEC_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/DEC_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO6_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO6_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO8_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO8_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO8_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO8_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO8_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO8_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO8_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO9_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO0_PUBCOMB.seq:*

cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*

cgn2_6/ptodata/2/pubpna/USO0_NEW_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                              5815158
                     GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15 US-10-051-835-14

10 US-09-814-353-172-4

15 US-10-814-455-268

10 US-09-814-353-18511

10 US-09-814-35-1669

10 US-09-814-644-346

10 US-10-184-644-346

10 US-10-184-634-346

10 US-10-184-634-346

10 US-09-854-867-3507

10 US-10-311-455-1616

10 US-09-854-867-362

10 US-10-311-455-128
                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                        2907579 segs, 2254313464 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                              - nucleic search, using sw model
                                                                                                                                                                                                                                                                               IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                           seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         671
671
1269
767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6319
2750
6681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Published
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                46.4
41.8
41.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       44
044
0.04
0.20
0.20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  39.6
4.0
4.4
                                                                                                                                                                                                                             score:
                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score
                                                                                              OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                               Minimum DB
Maximum DB
                                                                                                                                                                                                                                             Sequence:
                                                                                                                                                                                                                                                                                                                                        Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Database
                                                                                                                                                                                                       Title:
Perfect
                                                                                                                                  Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Result
No.
```

ö

Gaps

ö

Length 696; Indels 60 9 120 120

음

2 8 ⋩ q

8 qq ઠે

8

g

d

 $\dot{\delta}$ ద 원 8

ò

ģ

```
APPLICANT: OLEK, Alexander

APPLICANT: OLEK, Alexander

APPLICANT: PIEPENBROCK, Christian
APPLICANT: PIEPENBROCK, Christian
APPLICANT: PIEPENBROCK, Christian
APPLICANT: PIEPENBROCK, Christian
TITLE OF INVENTION: Diagnosis of Diseases Associated with the Immune System by Intra OF INVENTION: Cytosine methylation
FILE REFERENCE: 5013.1014
CURRENT APPLICATION NUMBER: US/10/311,455
CURRENT APPLICATION NUMBER: PCT/EPO1/07537
PRIOR PILING DATE: 2001-07-02
PRIOR PILING DATE: 2000-06-30
PRIOR FILING DATE: 2000-06-30
PRIOR FILING DATE: 2000-06-01
PRIOR PILING DATE: 2000-06-01
NUMBER OF SEQ ID NOS: 2424
SEQ ID NO 268
LENGTH: 9415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7617 АҢТААСССТААРААДАДТЯТАДАҢССТАДАДАДАДАДТТІСССАСТАРАДТАДАДАДАД 7558
                                                                                                                                                                                                                                        310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     385 AGAATACATGGATGAAAGAAAGGTGAGCACAGCCATTTCCTTTACAACAGAAATAACAGA
                                                                                                                                                                                                                                                                                             TTTCCCAGCCTCTAACCAAAGAACAACAAGTTTGGGAACATTCCTCTTCTGAAATAT
                                                                                                                                                                                                                                                                                                                                            ACAGCCCAAGTGTAACAGATACTTCTCCATGGGATGGTAAAAAGGAAGTTATTTCAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              625 AATGACCCCTTGGAAGGAGTTCAAAACAGGTTGCCATATGCTTTATGTGGAGTTTTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                447 TCCCAGCCTCTAACCAAGAACAACAAGTTTGGGAACATTCCTCTTCTGAAATATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           387 AATACATGGATGAAAGAAAGATGAGCACCACTTTCCTTTACAACAGAAATAACAGATT
                                                                                                                                   Gaps
                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens) US-10-311-455-268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 6.4%; Score 44.8; DB 15; Length 9415; Best Local Similarity 49.2%; Pred. No. 0.16; Matches 118; Conservative 0; Mismatches 122; Indels 0;
                                                                                   Length 461;
                                                                                                                                   Indels
                                                                                 Query Match 6.7%; Score 46.4; DB 10;
Best Local Similarity 46.0%; Pred. No. 0.011;
Matches 143; Conservative 0; Mismatches 168;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 268, Application US/10311455; Publication No. US20030143606A1; GENERAL INFORMATION:
), OTHER INFORMATION: n = A,T,C or G
US-09-814-353-17724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  685 AATATATAAAA 695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  431 AAAAAAAAA 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-311-455-268/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         565
                                                                                                                                                                                                                                                                                             445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                              AACAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGCAGTGACCTTTGAGAGTACATCT 240
                                                                                                                                   300
                                                                                                                                                                                        300
                                                                                                                                                                                                                                        GGAAGGAAAAGGAGCCATGAATCAAAAGGTGGGGAAAAAGGCCTTTTGGGAAGGTGGCAGTG 360
                                                                                                                                                                                                                                                                                          GGAAGGAAAAGGAGCCATGAATCAAAAGGTGGGAAAAAGGCCTTTTGGGAGGTGGCAGTG 360
                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                               GAACATTCCTCTCTTCTGAAATATGAAAGAGGGGATAAATACTGGAGTAGGATTGTGA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCCATGGGATG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541 AAAAAGTCAAGAGAAAAAAAAAAAGGCCCAAGTGTAACAGATACTTCTCCATGGGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTAAAAAGGAAGTTATTTCAATAAAATGACCCCTTGGAAGGAGTTCAAAACAGGTTGCCA 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTAAAAAGGAAGTTATTTCAATAAAATGACCCCTTGGAAGGAGTTCAAAACAGGTTGCCA 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17724, Application US/09814353
| Publication No. US20030165831A1
| GENERAL INFORMATION:
| APPLICANT: Lee, John
| APPLICANT: Lillib, James
| APPLICANT: Lillib, James
| TITLE OF INVENTION: THERAPY OF OVARIAN CANCER
| TITLE OF INVENTION: THERAPY OF OVARIAN CANCER
| TITLE OF INVENTION: THERAPY OF OVARIAN CANCER
| TITLE OF INVENTION: THERAPY OF OVARIAN CANCER
| TILL OF INVENTION: THERAPY OF OVARIAN CANCER
| TILL OF INVENTION: UNMER: US/09/814,353
| CURRENT APPLICATION NUMBER: US 60/191,031
| PRIOR PLILING DATE: 2000-03-21
| PRIOR FILING DATE: 2000-03-21
| PRIOR FILING DATE: 2000-06-15
| PRIOR FILING DATE: 2000-06-15
| PRIOR FILING DATE: 2000-06-15
| PRIOR FILING DATE: 2000-06-15
| PRIOR FILING DATE: 2000-07-25
| PRIOR FILING DATE: 2000-07-25
| PRIOR FILING DATE: 2000-07-25
| PRIOR FILING DATE: 2000-07-25
| PRIOR PELICATION NUMBER: US 60/257,672
| PRIOR PELICATION NUMBER: US 60/257,672
| PRIOR PELICATION NUMBER: US 60/257,672
| PRIOR PELICATION NUMBER: US 60/257,672
| PRIOR PELICATION NUMBER: US 60/257,672
| PRIOR PELICATION NUMBER: US 60/257,672
| PRIOR PELICATION NUMBER: US 60/257,672
| PRIOR PELICATION NUMBER: US 60/257,672
| PRIOR PELICATION NUMBER: US 60/257,672
| PRIOR PELICATION NUMBER: US 60/257,672
| PRIOR PELICATION NUMBER: US 60/257,672
| PRIOR PELICATION NUMBER: US 60/257,672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCCTTTACAACAGAAATAACAGATTTCCCAGCCTCTAACCAAAGAAACAACAAGTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAACATTCCTCTTCTGAATATGAAAGAGAGGGGATAAATACTGGAGTAGGATTGTGA
                                                                                                                                   CTAGAGTGGTATGTGTAGAGCCAGATTTTCAGCATCAGAACCATCAAGCATTTTGGGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATGCTTTATGTGGAGTTTTGAAAAATATAAAAT 696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661 TATGCTTTATGTGGAGTTTTGAAAAATATATAAAAT 696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
NAME/KEY: misc_feature
LOCATION: 195, 243, 244, 245, 397, 398, 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                          301
                                                                              181
                                                                                                                                   241
                                                                                                                                                                                   241
                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       199
```

셤

셤 ઠે

```
169
                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                109
                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 ATAAACTGGGAAGAGGACAGGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            220 далалалалалалалалалалалалалалалалалттиланалалалалалалалала 161
                                                                                                                                                                                                                               62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Lee, John
APPLICANT: Lee, John
APPLICANT: Lillib. Jamela
APPLICANT: Lillib. Jamela
APPLICANT: Lillib. Jamela
APPLICANT: Lillib. Jamela
APPLICANT: Lillib. Jamela
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: THERAPY OF OVARIAN CANCER
FILE REPERBACE: MRI. OOBER: 2001-03-21
CURRENT APPLICATION NUMBER: US 60/191,031
PRIOR FILING DATE: 2000-03-21
PRIOR FILING DATE: 2000-05-25
PRIOR FILING DATE: 2000-05-25
PRIOR FILING DATE: 2000-05-25
PRIOR FILING DATE: 2000-05-25
PRIOR FILING DATE: 2000-05-25
PRIOR FILING DATE: 2000-07-26
PRIOR FILING DATE: 2000-07-26
PRIOR FILING DATE: 2000-07-25
PRIOR FILING DATE: 2000-07-25
PRIOR FILING DATE: 2000-07-25
PRIOR FILING DATE: 2000-07-25
PRIOR FILING DATE: 2000-12-21
NUMBER OF SEQ ID NOS: 22037
SEQ ID NO 18511
                                                                                                                                                                                                                                                                                                                                            63 GA--TACAGACTIGGAAGACAICAGIGCIGAGCAGIAAAIGAGAIGAITCAGGAAAGAGI
                                                                                                                                                                                                                                                                                                                                                                                             168 carcrecarárcegrearea area accacada a carca caraca a carca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de caraca de c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            459 ACCAAAGAAACAACATTTGGGAACATTCCTCTTTCTGAAATATGAAAGAGGGGAT
                                                                                                                                                                                                                            3 AAATAICTGATAGGCAGTTAGAAATTTGAGTTTGGAACACAGGAGAGAGGCTTTGATGGC
                                                                                                                                                                                                                                                                                      228 AAATGTGAAGTTTGCAGTTGAATATTTGCCCTGGAACTTAGGAAAAACAATGTGTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         399 AAAGAAAGGTGAGCACAGCCATTTCCTTTACAACAGAAATAACAGATTTCCCAGCCTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               280 AAAAAAGGTTTTTACAACAATTTTTTTTTTTTCCCAAAAAGTTTTTTCCCCCCAAAA
                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                         ..
(1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: EST HUMAN HIT: AWS89784.1, EVALUE 1.10e+00 ; OTHER INFORMATION: NT HIT: L11910.1, EVALUE 4.00e-02 US-09-864-761-26934
                                                                                                            Score 41.8; DB 9; Length 300;
Pred. No. 0.17;
0; Mismatches 102; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 10; Length 508;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80; Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 AACAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGCA 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATGATAGTGTATTCAAATTGGCAAAAGAGACTGAGAA 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
5.9%; Score 41; DB 1
Best Local Similarity 52.7%; Pred. No. 0.39;
Matches 89; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18511, Application US/09814353
Publication No. US20030165831A1
GENERAL INFORMATION:
                                                                                                               Query Match
Best Local Similarity 52.5%;
Matches 115; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
CORGANISM: Homo sapiens
US-09-814-353-18511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-814-353-18511/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                    567 AGCCCAAGTGTAACAGATACTTCTCCATGGGATGGTAAAAAGGAAGTTATTCAATAAAA 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EXPRESSED IN PLACENTA, SIGNAL = 1.1
EXPRESSED IN ADULT LIVER, SIGNAL = 1.4
EXPRESSED IN BT474, SIGNAL = 1.1
EXPRESSED IN FETAL LIVER, SIGNAL = 0.98
EXPRESSED IN BEAN, SIGNAL = 1.3
EXPRESSED IN BEAN, SIGNAL = 0.99
EXPRESSED IN LUNG, SIGNAL = 0.99
                                                                                                                                                                                                                                                                                         Sequence 26934, Application US/09864761
Patent No. US20020048763A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
CRGANISM: Homo sapiens
PEATURE:
CTHER INFORMATION: MAP TOTHER INFORMATION: EXPRE
CTHER INFORMATION: EXPRE
CTHER INFORMATION: EXPRE
CTHER INFORMATION: EXPRE
CTHER INFORMATION: EXPRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: OTHER INFORMATION:
                                                                                                                                                                                                                                                           -09-864-761-26934/c
```

ö

g

```
250 MARSASSSSSSSSSSSDSDVSVKKPPRGRKPAEKPLPKPRGRKPKPERPPSSSSSDSDSD 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            370 SGDELREDDEPVKKKGRKGRKGRPSSSDSEPRAELERRAKKBAKKPGSSSTEPARKPGQ 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  454 CTCTAACCAAAGAAACAACATTTGGGAACATTCCTCTCTTCTGAAATATGAAAGAGAG 513
                                                                                                                                                                                                                                                                                                                                                                                                                   70 KPNKRKGFNEGLWEIQNNPHASYSAPPVSSSDSEAPEANPADGSDADEDDEDRGVMAVT 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           214 TTAGCAGTGACCTTTGAGAGTACATCTCTAGAGTGGTATGTGTAGAGCCAGATTTTCAGC 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              334 GAAAAGGCCTTTTGGGAGGTGGCAGTGTGGGTAGGGAGTAGGGCTCCGGTTAGAATACAT 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    394 GGATGAAAGAAAGGTGAGCACAGCCATTTCCTTTACAACAGAAATAACAGATTTCCCAGC 453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                490 SPDVKRČLNALEELGTLQVTSQILQKNTDVVATLKKIRRYKANKDVMEKAAEVYTRLKSR 549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  190 SESSSESEKTSDODFTPEKKAAVRAPRRGPLGGRKKKKAPSASDSDSKADSDGAKPEPVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3430R1C217 CURRENT APPLICATION NUMBER: US/10/184,634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       154 GGAACATATTTAAGGACTGGGTAGAAAAACAAGAGTATGAACAAGAGTGAGGAGATTA
                                                                                                                                                                                                                                                                                                                                                                             34 TIGGAACACAGGAGAGGAGTITGAIGGCGAIACAGACTIGGAAGACAICAGIGCIGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                550 VLGPKIEAVOKVNKAGMEKEKABEKLAGEELAGEEAPQEKAEDKPSTDLSAPVNG 604
                                                                                                                                                                                                                                                                                                                                Indels
                                                                                   Prior Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 612
SEQ ID NO 346
                                                                                                                                                                                                                                                                                    5.8%; Score 40.2; DB 15;
Similarity 8.6%; Pred. No. 0.76;
46; Conservative 172; Mismatches 317;
ACIDS ENCODING THE SAME
                      FILE REFERENCE: P3430R1C227
CURRENT APPLICATION NUMBER: US/10/184,644
CURRENT FILING DATE: 2002-06-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/10184634 . US20030068684A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Watanabe, Colin K.
Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gurney, Austin L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Smith, Victoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Baker, Kevin P. APPLICANT: Chen, Jian
                                                                                                                                                                                      TYPE: PRT
ORGANISM: Homo Sapien
     TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 346, Applic
Publication No. US20
GENERAL INFORMATION
                                                                                                                                                                                                                                       US-10-184-644-346
                                                                                                                                                                                                                                                                                                                                46;
                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   요
                                                                                                                                                                                                                                                                                                                                                                                                                           쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ਨੇ
                                                                                                                                           GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: OLEK, Alexander

APPLICANT: PIEPENBROCK, Christian

APPLICANT: BERLIN, Kurt

TITLE OF INVENITON: Ortosine methylation

FILE REFRENCE: 5013.1014

CURRENT APPLICATION NUMBER: US/10/311,455

CURRENT APPLICATION NUMBER: D02-12-16

PRIOR APPLICATION NUMBER: D2 1003-12-16

PRIOR PILING DATE: 2000-06-30

PRIOR FILING DATE: 2000-06-30

PRIOR FILING DATE: 2000-06-30

PRIOR FILING DATE: 2000-06-30

PRIOR FILING DATE: 2000-06-30

PRIOR FILING DATE: 2000-06-30

PRIOR FILING DATE: 2000-06-30

PRIOR FILING DATE: 2000-06-30

PRIOR FILING DATE: 2000-06-30

PRIOR FILING DATE: 2000-06-30

PRIOR PILING DATE: 2000-06-30

PRIOR PILING DATE: 2000-06-30

PRIOR PILING DATE: 2000-06-30

PRIOR PILING DATE: 2000-06-30

PRIOR PILING DATE: 2000-06-30

PRIOR PILING DATE: 2000-06-30

PRIOR PILING DATE: 2000-06-30

PRIOR PILING DATE: 2000-06-30

PRIOR PILING DATE: 2000-06-30

PRIOR PILING DATE: 2000-06-30

PRIOR PILING DATE: 2000-09-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 488 CCTCTCTTCTGAAATATGAAAGAGAGGGGATAAATACTGGAGTAGGATTGTGAAAAAGT 547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Wood, William I.
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                548 CAAGAGAAAAAAAAAAGACCCCAAGTGTAACAGATACTTCTCCATGGGATGGTAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     428 ACAACAGAAATAACAGATTTCCCAGCCTCTAACCAAAGAAACAACAAGTTTGGGAACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION: chemically treated genomic DNA (Homo sapiens)
  Length 6668;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 40.6;
Pred. No. 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: unsure
COCATION: 4733
CHER INOPWATION: n is a or g or c or t
US-10-311-455-1669
                                                                                                                  Sequence 1669, Application US/10311455
Publication No. US20030143606A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Sequence 346, Application US/10184644; Publication No. US20030044930A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5308 CAAACTTTCTAAAAAAA 5290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          608 GGAAGTTATTTCAATAAAA 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Smith, Victoria
Watanabe, Colin K.
Wood, William I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Goddard, Audrey
Godowski, Paul J.
Gurney, Austin L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 100; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Desnoyers, Luc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Baker, Kevin P. APPLICANT: Chen, Jian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 7
US-10-184-644-346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER
```

g

ò

ò

a

ઠે

ଚ

```
쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               જે
                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                        KPNKRKGFNEGLWEIQNNPHASYSAPPPVSSSDSEAPEANPADGSDADEDDEDRGVMAVT 129
                                                                                                                                                                                                                                                                                                                                                                                 370 SGDELREDDEPVKKRGRKGRGRGPSSSDSEPEAELEREAKKSAKKPQSSSTEPARKPGQ 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEKRVRPEEKQQAKPVKVERTRKRSEGFSMDRKVEKKKEPSVEEKLQKLHSEIKFALKVD 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CICTAACCAAAGAAACAACAAGITIGGGAACAIICCICTCTCTGAAAIAIGAAAGAGAG 513
                                                                                                                                                                                                                                                                                          AGTAAATGAGATGAGACAGGAAAGAGTATAAACTGGGAAGGAGGACAGGGTCAA 153
                                                                                                                                                                                                                                                                                                                                                           154 GGAACATATTTAAGGACTGGGTAGAAAACAAGAGAGTATGAACAAGAGTGAGGAGTTA 213
                                                                                                                                                                                                                                                                                                                                                                                                                              TTAGCAGTGACCTTTGAGAGTACATCTCTAGAGTGGTATGTGTAGAGCCAGATTTTCAGC 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAAAGGCCTTTTGGGAGGTGGCAGTGTGGGTAGGGAGTAGGGCTCCGGTTAGAATACAT 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGATGAAAGAAAGGTGAGCACAGCCATTTCCTTTACAACAGAAATAACAGATTTCCCAGC 453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SPDVKRCLNALEELGTLQVTSQILQKNTDVVATLKKIRRYKANKDVMEKAAEVYTRLKSR 549
                                                                                                                                                                                                                       34 TTGGAACACAGGAGAGAGGCTTTGATGGCGATACAGACTTGGAAGACATCAGTGCTGAGC 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Xu, H.
TITLE OF INVENTION: 1040.
TITLE OF INVENTION: 1040.
FILE REFERENCE: ELITRA 0348
CURRENT APPLICATION NUMBER: US/10/282,1228
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR PILING DATE: 2000-03-10.
                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      550 VLGPKIEAVOKVNKAGMEKEKAEEKLAGEELAGEEAPQEKAEDKPSTDLSAPVNG 604
                                                                                                                                                                                        ô
                                                                                                                                                        Length 671;
                                                                                                                                                                                        Indels
CURRENT FILING DATE: 2002-06-28
Prior Application removed - See File Wrapper or Palm NUMBER OF SEQ ID NOS: 612
SEQ ID NO 346
LENGTH: 671
                                                                                                                                                    5.8%; Score 40.2; DB 15;
ilarity 8.6%; Pred. No. 0.76;
Conservative 172; Mismatches 317;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 16543, Application US/10282122A Publication No. US20040029129A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Wang, Liangsu
APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Zyskind, Judith
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John
APPLICANT: Carr, Grant
APPLICANT: Yamamoto, Robert
APPLICANT: Forsyth, R.
                                                                                   TYPE: PRT CORGANISM: Homo Sapien US-10-184-634-346
                                                                                                                                                    Query Match
Best Local Similarity
Matches 46; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-282-122A-16543
                                                                                                                                                                                                                                                        70
                                                                                                                                                                                                                                                                                          94
                                                                                                                                                                                                                                                                                                                                                                                                                              214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       490
                                                                                                                                                                                                                                                  임
                                                                                                                                                                                                                                                                                          \dot{\delta}
                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                  ठ
                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      임
                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

```
79 ACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGTATAAACTGGGAAGAGGAC 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   520 TTAGGAGCAGTTATAGGAA---AGTTTAGAACTAGAAATAAAGACAGAAATATGTTAACA 576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       199 AGAGTGAGGAGATTATTAGCAGTGACCTTTGAGAGTACATCTCTAGAGTGGTATGTGTAG
258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         577 AGATTTATAAATATATAGAGACCTTAAGTTTTCAATGGATGTGCCAAGCAGGAAGATGGAAG 636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR FILING DATE: 2000-05-24
PRIOR PLING DATE: 2000-05-26
PRIOR PLING DATE: 2000-05-26
PRIOR PLING DATE: 2000-09-09
PRIOR PLING DATE: 2000-09-09
PRIOR FILING DATE: 2000-09-09
PRIOR FILING DATE: 2000-10-23
PRIOR PLING DATE: 2000-10-23
PRIOR PLING DATE: 2000-11-27
PRIOR PLING DATE: 2000-11-27
PRIOR PLING DATE: 2000-11-27
PRIOR PLING DATE: 2000-11-22
PRIOR PLING DATE: 2000-11-22
PRIOR PLING DATE: 2000-11-22
PRIOR PLING DATE: 2001-02-09
PRIOR PLING DATE: 2001-02-09
PRIOR PLING DATE: 2001-02-09
PRIOR PLING DATE: 2001-02-09
PRIOR PLING DATE: 2001-02-09
PRIOR PLING DATE: 2001-02-09
PRIOR PLING DATE: 2001-02-09
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
PRIOR PLING DATE: 2001-02-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19 GTTAGAAATTTGAGTTTGGAACACAGGAGAGGGCTTTGATGGCGATACAGACTTGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           460 AATACTCCAGATAAAAATGCATTAAAATATCTTATGAAAACTATAATTGAGGACGAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       400 GCTTTAAATATAGCTATAAACATTCAAGTGGAGACTTTATAGCCGTATATGATGCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Polymorphisms in the Human Genome
TITLE OF INVENTION: Polymorphisms in the Human Genome
FILE REFERENCE: 108827.129
CURRENT APPLICATION NUMBER: US/10/027,632
CURRENT FILING DATE: 2002-04-30
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR PILING DATE: 2000-07-12
PRIOR PLING DATE: 2000-07-12
PRIOR FILING DATE: 2000-04-20
PRIOR FILING DATE: 2000-03-29
PRIOR FILING DATE: 2000-03-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ٠.
ش
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1269;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 5.8%; Score 40.2; DB 13; Best Local Similarity 47.6%; Pred. No. 1.1; Matches 151; Conservative 0; Mismatches 163;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 153507, Application US/10027632 Publication No. US20020198371A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Clostridium botulinum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          319 GAATCAAAAGGTGGGGA 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      697 dAGTTGAATGGATGGGA 713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-027-632-153507/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-282-122A-16543
```

φ

```
381 GGTTAGAATACATGGATGAAAGGTGAGCACAGCCATTTCCTTTACAACAGAAATAA 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGATITICCCAGCCTCTAACCAAAGAAACAACAAGTTTGGGAACATTCCTCTCTTGAA 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cercirirerograciontrachandanaroganderocanencarirerranaceroca 534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATGAAAGAGAGGATAAATACTGGAGTAGGATTGTGAAAAAAAGTCAAGAGAAAAAA 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           533 ACATAAAAAGGACCGTATATATGATGATAATGGTAGGAAAAATCACCTATAGAAAAG 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              561 AAGAACAGCCCAAGTGTAACAGATACTTCTCCATGGGATGGTAAAAAGGAAGTTATTTCA 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGGAATGTCAAGTTCTCTGTAATGGTATGATGCTTGATTTCAAGTGAATTTAGCCA 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Delymorphisms in the Human Genome
TITLE OF INVENTION: Delymorphisms in the Human Genome
FILE REFERENCE: 108877.129
CURRENT APPLICATION NUMBER: US/10/027,632
CURRENT APPLICATION NUMBER: US/02.04-30
PRIOR PILING DATE: 2000-07-12
PRIOR FILING DATE: 2000-07-12
PRIOR PELING DATE: 2000-07-12
PRIOR PELING DATE: 2000-07-24
PRIOR PILING DATE: 2000-07-29
PRIOR PILING DATE: 2000-03-29
PRIOR PILING DATE: 1000-03-29
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR PILING DATE: 1999-10-28
PRIOR PILING DATE: 1999-10-28
PRIOR PILING DATE: 1999-10-28
PRIOR PILING DATE: 1999-00-28
PRIOR PILING DATE: 1999-00-28
PRIOR PILING DATE: 1999-00-28
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1999-00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 13; Length 767;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 40; DB 13; Length 76
Pred. No. 0.93;
0; Mismatches 135; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             621 ATAAATGACCCCTTGGAAGGAGTTCAAAA 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Arabagiccargccrraagaagirraraa 384
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR FILING DATE: 2000-02-24
PRIOR PAPLICATION NUMBER: US 60/167,363
PRIOR FILING DATE: 1999-11-23
PRIOR FILING DATE: 1999-09-28
PRIOR RELING DATE: 1999-09-28
PRIOR RELING DATE: 1999-09-08
NUMBER OF SEQ ID NOS: 325720
SOFTWARE: PSECSEQ for Windows Version 4.0
SCOTTWARE: PSECSEQ 10 NOS: 325720
LENGTH: 767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 153507, Application US/10027632 Publication No. US20030204075A9; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 49.3%;
Matches 133; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -10-027-632-153507/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: Human
US-10-027-632-153507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
CRGANISM: Human
US-10-027-632-153507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
sequence 1616, Application US/10311455
; Sequence 1616, Application US/20030143606A1
; GENERAL INFORMATION:
; Publication No. US20030143606A1
; GENERAL INFORMATION:
; APPLICANT: DIEX, Alexander
; APPLICANT: DIEX, Alexander
; APPLICANT: DIEX, Alexander
; APPLICANT: DIEXLIN, Kurt
; TITLE OF INVENTION: Dytosine methylation
; TITLE OF INVENTION: Dytosine methylation
; TITLE OF INVENTION: Oytosine methylation
; TITLE OF INVENTION: Oytosine methylation
; FILE OF INVENTION: Oytosine methylation
; FILE OF INVENTION: Oytosine methylation
; FILE OF INVENTION: Oytosine methylation
; FILE OF INVENTION: Oytosine methylation
; FILE OF INVENTION: Oytosine methylation
; FILE OF INVENTION: Oytosine methylation
; FILE OF INVENTION: Oytosine methylation
; FILE OF INVENTION: Oytosine methylation
; FILE OF INVENTION: Oytosine methylation
; FILE OF INVENTION: Oytosine methylation
; FILE OF ENERGY OYTOSIC OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OF ENERGY OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; FILE OYTOSIC
; 
                                                                                ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            487 TCCTCTTCTGAAATATGAAAGAGAGGGGATAAATACTGGAGTAGGATTGTGAAAAAAG 546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     547 TCAAGAGAAAAAAAAAAAGAACAGCCCAAGTGTAACAGATACTTCTCCATGGGATGGTAAAA 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         561 AAGAACAGCCCAAGTGTAACAGATACTTCTCCATGGGATGGTAAAAAGGAAGTTATTTCA 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  473 AATGGAATGTCAAGTTCTCTGTAATGGTATGATGCTTGATTTCAAGTGAATTTAGCCA 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              593 cercititergergergerradaaadagraregaaggraergaeeerrerraaacerge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            381 GGTTAGAATACATGGATGAAAGAAAGGTGAGCACAGCCATTTCCTTTACAACAGAAATAA
                                                                                                                                                                                                                                                                                                                       441 CAGATITICCCAGCCTCTAACCAAGAACAACAAGTTTGGGAACATTCCTCTCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                501 ATATGAAAGAGGGGATAAATACTGGAGTAGGATTGTGAAAAAAAGTCAAGAGAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   427 TACAACAGAAATAACAGATTTCCCAGCCTCTAACCAAAGAAACAACAAGTTTGGGAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       651 GCCTATAATATGTTGATCAATCAGTTGTAATGCAGTCATTTCATTTGGA--GAAACAGC
                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 39.6; DB 15; Length 6319;
Pred. No. 3.8;
0; Mismatches 114; Indels 0;
Ouery Match
5.7%; Score 40; DB 16; Length 76
Best Local Similarity 49.3%; Pred. No. 0.93;
Matches 133; Conservative 0; Mismatches 135; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   607 AGGAAGTTATTTCAATAAATGACCCCTTGGAAGGAGTTCAA 648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        621 ATAMATGACCCCTTGGAAGGAGTTCAAAA 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    413 Araaagrccargcccrraagaagrraraa 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.7%; initarity 48.6%; in Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   al Similarity
108; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-311-455-1616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loci
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
```

```
APPLICANT: OLEK, ALEXANDER, ALEXANDER, ALEXANDER, ALEXANDER, ALEXANDER, ALEXANDER, ALEXANDER, ALEXANDER, ALEXANDER, ALEXANDER, ALEXANDER, APPLICANT: BIEFININ, KULT.

APPLICANT: BIEFININ, KULT.

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION: Cytosine methylation

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INVENTION

TITLE OF INV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5747 akarchakicczkitkaczakakkikkakkakkaktrikkatkarktraktoczaktr 5688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5687 ACABARTTACATCTABATRTRARABARARTARARCABARATTARARTRARATTA 5628
                                                                                                                                                                                                                                                                          1743 AAATGTCGAGTAGGAGTTGGATATAGGAGTCTGGARTTCAGGGGAGAGGTCTGGGCTGG 1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        593 ATGGGATGGTAAAAGGAAGTTATTTCAATAAAATGACCCCTTGGAAGGAGTTCAAAACA 652
                                                                                                                                                                                                                                       19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       473 AAGTITGGGAACATTCCTCTTCTGAAATATGAAAGAGGGGATAAATACTGGAGTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               533 GATTGTGAAAAAGTCAAGAGAAAAAAAAAAAGAACAGCCCAAGTGTAACAGATACTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     413 ACAGCCATTTCCTTTACAACAGAAATAACAGATTTCCCAGCCTCTAACCAAAGAAAAAA
                                                                                                                                                                                                                                3 AAAIAICTGAIAGGCAGIIAGAAAITIGAGITIGGAACACAGAGAGAGAGAGG-CTTIGAIGG
                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens) US-10-311-455-128
                                                                                                                                                                         ı;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 39.4; DB 15; Length 6681; Pred. No. 4.4;
                                                                                                           Length 2750;
                                                                                                              Query Match
5.7%; Score 39.4; DB 13; Length:
Best Local Similarity 67.0%; Pred. No. 2.7;
Matches 69; Conservative 1; Mismatches 32; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                1683 AGATATAAATTTGGGAGTCATCAGCGTATAGATGGTATTAAA 1641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches 151; Indels
                                                                                                                                                                                                                                                                                                                                                               62 CGATACAGACTTGGAAGACATCAGTGCTGAGCAGTAAATGAGA 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5627 ACATCTTAACATATTTATATATATATATATAATTATTA 5587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   653 GGTTGCCATATGCTTTATGTGGAGTTTTGAAAAATATAAA 693
; LOCATION: (2099)..(2099)
; OTHER INFORMATION: n is a, c, g or t
US-09-854-867-362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 14
US-10-311-455-128/c
's Sequence 128, Application US/10311455
'publication No. US20030143606A1
'general information:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 15
US-10-240-452-4/c
; Sequence 4, Application US/10240452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 46.3%;
Matches 130; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPB: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                    ઠ
                                                             RESULT 13
US-09-854-867-362/c
US-09-854-867-362/c
; Sequence 362, Application US/09854867
; Publication No. US20030224356A1
; GENERAL INFORMATION:
    APPLICANT: OAN, KNOLL H
    APPLICANT: OAN, ROGAN, PETER K
    TITLE OF INVENTION: SINGLE COPY GENOMIC HYBRIDIZATION PROBES AND METHOD OF GENERATING
    TITLE OF INVENTION: US/09/854,867
; CURRENT APPLICATION WUMBER: US/09/854,867
; CURRENT FILING DATE: 2003-05-08
; NUMBER OF SEQ ID NOS: 613
; SOFURMARE: Parentin version 3.1
; SEQ ID NO 362
; LENGTH: 2750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a, gor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ς,
σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ϋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc feature
LOCATION: (1117). (1118)
OTHER INFORMATION: n is a, c,
FEATURE: NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OCATION: (772)..(772)
THER INFORMATION: n is a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AME/KEY: misc feature OCATION: (116)..(116) THER INFORMATION: n is a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AME/KEY: misc feature
OCATION: (500)..(500)
THER INFORMATION: n is a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OCATION: (89)..(89)
THER INFORMATION: n is a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COCATION: (17)...(17)
THER INFORMATION: n is a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: repeat region
LOCATION: (1). (2750)
OTHER INFORMATION: line2
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc feature CCATION: (548)..(548)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AME/KEY: misc feature CCATION: (578)..(578)
THER INFORMATION: n is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IAME/KEY: misc feature
OCATION: (604)..(604)
THER INFORMATION: n is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc feature
CCATION: (709)..(709)
THER INFORMATION: n is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc feature
LOCATION: (797)..(797)
OTHER INFORMATION: n is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OCATION: (433)..(433)
THER INFORMATION: n is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc feature (772)..(772)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /KEY: misc feature
TION: (433)..(433)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AME/KEY: misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'EATURE:
IAME/KEY:
```

```
5867 ATATCTCTTTTCTTTAAAAAAAAAAAAAAAAAATAATTAACTAAAAATAAAATAAAATAC 5808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  413 ACAGCCATTTCCTTTACAACAGAATTACCAGCTTTCCCAGCCTCTAACCAAAGAAACAAC 472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         593 ATGGGATGGTAAAAAGGAAGTTATTTCAATAAAATGACCCTTGGAAGGAGTTCAAAACA 652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            473 AAGTTTGGGAACATTCCTCTCTTCTGAAATATGAAAGAGGGGATAAATACTGGAGTAG 532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          533 GATTGTGAAAAAAGTCAAGAGAAAAAAAAAGAACAGCCCAAGTGTAACAGATACTTCTCC 592
## Publication No. Us20030162194A1
| GENERAL INFORMATION:
| APPLICANT: DIEK, Alexander |
| APPLICANT: DIEK, Alexander |
| APPLICANT: DIERIN, Kurt |
| APPLICANT: BERLIN, Kurt |
| TILLE OF INVENTION: Diagnosis of Diseases Associated with Apoptosis |
| TILLE REPRENCE: 5013.106 |
| CURRENT APPLICATION NUMBER: US/10/240,452 |
| CURRENT FILING DATE: 2000-10-02 |
| PRIOR APPLICATION NUMBER: PCT/EP01/03969 |
| PRIOR FILING DATE: 2000-04-06 |
| PRIOR PILING DATE: 2000-04-06 |
| PRIOR PILING DATE: 2000-04-07 |
| PRIOR FILING DATE: 2000-04-07 |
| PRIOR FILING DATE: 2000-04-07 |
| PRIOR APPLICATION NUMBER: DE 10019173.8 |
| PRIOR FILING DATE: 2000-06-30 |
| PRIOR APPLICATION NUMBER: DE 10032529.7 |
| PRIOR APPLICATION NUMBER: DE 10043826.1 |
| PRIOR PILING DATE: 2000-09-01 |
| NUMBER OF SEQ ID NOS: 78 |
| LENGTH: 6681 |
| WANGER OF SEQ ID NOS: 78 |
| LENGTH: 6681 |
| WANGER OF SEQ ID NOS: 78 |
| LENGTH: 6681 |
| WANGER OF SEQ ID NOS: 78 |
| LENGTH: 6681 |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-240-452-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 39.4; DB 15; Length 6681;
Pred. No. 4.4;
0; Mismatches 151; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5627 ACATCTTAACATATTATATATTTATTATATTATTA 5587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 46.3%;
Matches 130; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
```

Search completed: April 26, 2004, 03:19:16 Job time : 207.468 secs

```
Sequence 1, Appli
Sequence 1, Appli
Sequence 592, App
                                                                                                                                                                                                                                          Sequence 18033,
Sequence 11, App.
Sequence 11, App.
                                                                                                 Sequence 1, A
Sequence 1, A
Sequence 45,
                                                                                                                                                  Sequence 60,
Sequence 3,
                                                 Sequence Sequence Sequence 3
                                                                                                                                                                                   Sequence
                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 7218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: PAPELICATION DATA:
APPLICATION NUMBER: US/08/232,463
FILING DATE:
APPLICATION NUMBER: US/07/935,313
FILING DATE:
APPLICATION NUMBER: BP 91 114 300.6
FILING DATE:
APPLICATION NUMBER: BP 91 114 300.6
FILING DATE: AC-AUG-1891
ATTORNEY/AGENT INFORMATION:
NAME: BEAT: Scephen A.
REGISTRATION INFORMATION:
NAME: BEAT. Scephen A.
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
THE COMMUNICATION INFORMATION:
THE COMMUNICATION INFORMATION:
THE COMMUNICATION INFORMATION:
THE COMMUNICATION INFORMATION:
THE COMMUNICATION INFORMATION:
THE COMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 14, Application US/08232463
Fatent No. 5670367
GENERAL INFORMATION:
APPLICANT: SCHEIFLINGER, F.
APPLICANT: PALKNER, F. G.
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
NUMBER OF SEQUENCES: 52
CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley & Lardner
STREET: 1800 Diagonal Road, Suite 500
US-09-072-596-323
US-09-072-5967-328
US-09-234-332-1
US-08-589-711-1
US-08-95-476-7
US-08-95-476-7
US-09-790-988-1
US-09-790-988-1
US-09-790-88-1
US-09-896-1
US-09-896-1
US-08-559-8968-1
US-08-559-8968-1
US-08-559-8968-1
US-09-351-794A-1
US-09-351-794A-1
US-09-351-794A-1
US-09-376-594-592
US-09-376-594-592
US-08-461-595-11
US-08-340-538-11
US-08-340-538-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                  ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12.8%; Score 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Foley & Lardner STREET: 1800 Diagonal Road, Suite CITY: Alexandria STATE: VA COUNTRY: USA ZIP: 22313-0299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
TENGTH: 7218 hard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (703)836-9300
(703)683-4109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 7218 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                 2653
2653
2653
2653
640681
640681
395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; IMMEDIATE SOURCE:
; CLONE: pTZgpt-F18
US-08-232-463-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                   RESULT 1
US-08-232-463-14/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
     Sequence 14, Appl
Sequence 6, Appli
Sequence 17, Appl
Sequence 17, Appl
Sequence 17, Appl
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 10, Appl
Sequence 8, Appli
Sequence 13, Appl
Sequence 11, Appl
Sequence 616, App
Sequence 15639, Ap
                                                                                                                    April 25, 2004, 07:15:18; Search time 34:5277 Seconds (without alignments) 11186.557 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                     1 taaaaatatctgataggcagt...........ttttgaaaaatatataaaat 696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 32
Sequence 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /cgn2_6/ptodata/2/ina/5A_COWB.seq:*
/cgn2_6/ptodata/2/ina/5B_COWB.seq:*
/cgn2_6/ptodata/2/ina/6A_COWB.seq:*
/cgn2_6/ptodata/2/ina/6B_COWB.seq:*
/cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
                     GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCT-US95-05741-1

US-09-621-976-2813

US-08-477-831C-1

US-08-477-831C-1

US-08-477-831C-1

US-08-477-831C-1

US-08-477-831C-1

US-08-477-831C-13

US-08-477-831C-13

US-08-477-831C-13

US-09-620-312D-616

US-09-620-312D-616

US-08-213-419B-3

US-08-213-419B-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-232-463-14
US-08-687-580B-6
US-09-334-818A-8
US-09-244-796-17
US-09-244-796-17
US-08-910-973-1
US-08-910-973-1
                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-557-884-1
US-09-643-990A-:
                                                                                                                                                                                                                                                                                                      682709 segs, 277475446 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                        - nucleic search, using sw model
                                                                                                                                                                                                                                                     IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Issued Patents NA:*
                                                                                                                                                                                                                                                                                                                                                                    Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                  US-10-051-835-14
696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score
                                                                                        OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Database :
                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                        Searched:
                                                                                                                       Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Result
```

U-010885-8

```
253 GIGTAGAGCCAGATTTTCAGCATCAGAACCATCAAGCATTTTGGGGGTGGAAAGGA 312
                                                                                                                                                73 TGGAAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGTATAAACTGGGAA 132
                                                                                                                                                                                                                                      193 TGAACAAGAGTGAGGAGATTATTAGCAGTGACCTTTGAGAGTACATCTCTAGAGTGGTAT 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313 AGCCATGAATCAAAAGGTGGGGAAAAGGCCTTTTGGGAGGTGGCAGTGGGGTAGGGAGT 372
                                                              APPLICANT: MECHERS, Leo Sjoerd
APPLICANT: MECHERS, Leo Sjoerd
APPLICANT: MECHERS, Leo Silene
APPLICANT: MONSTEIN, Anne Silene
APPLICANT: WON DEVENER. TROOST, Johanna Petronella Els
APPLICANT: OIL, Stephan Andres
APPLICANT: BERS-VLOEMANS, Alexandra Aleida
APPLICANT: BERS-VLOEMANS, Alexandra Aleida
APPLICANT: BELA-BUURLAGE, Marianne Beatrix
TITLE OF INVENTION: Antifungal proteins, DNA coding therefor, and
TITLE OF INVENTION: Antifungal proteins DNA coding therefor, and
TITLE OF INVENTION: Antifungal proteins ame
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSE: LADAS & PARRY
STREET: 26 WEST 61 STREET
CITY: NEW YORK
                    Gaps
                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: NY
ZIP: 10023
COUNTRY: US.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: 3-1/4" Disk 1.44MB
COMPUTER: IBM FC compatible
OPERATING SYSTEM: Microsoft Windows
CURRATING SYSTEM: Microsoft Windows
CURRATING SYSTEM: Microsoft Windows
CURRATING DATE: 20-NOV-1996
FILING DATE: 20-NOV-1996
CLASSIFICATION NUMBER: US/08/697,580B
FILING DATE: 2-SEP-1994
FFILING DATE: 2-SEP-1994
FFILING DATE: 9-FEB-1994
FFILING DATE: 9-FEB-1994
ATTORNEY/AGENT INFORMATION:
NAME: MASS, Clifford J.
REGISTRATION NUMBER: 30,086
Best Local Similarity 4.3%; Pred. No. 5.5e-16;
Matches 17; Conservative 249; Mismatches 129; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 373 AGGCTCCGGTTAGAATACATGGATGAAAGAAAGG 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 6, Application US/08687580B Patent No. 6291647 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 2
US-08-687-580B-6/c
                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                   g
                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

```
join(774..911, 1045..1154, 3105..3375, 4226..4328,
4432..4777, 4891..5253, 5336..5414, 5531..5743)
REFERENCE/DOCKET NUMBER: U-0:
TELECPHONE: (212) 708 1890
TELEFAX: (212) 246 8959
TELEFAX: 23288
TELEFAX: 100 8059
INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS:
LENGTH: 6305 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPPLOGY: Linear
MOLECULE TYPE: DNA (genomic)
ORLGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Nicotiana tabacum
STRAIN: Samsun NN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            intron
4778..4890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      intron
5415..5530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sig_peptide
774..839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               exon
4226..4328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         intron
3376..4225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         intron
4329..4431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      intron
5254..5335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      intron
1155..3104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        exon
3105..3375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  exon
4432..4777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            exon
5336..5414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  exon
5531..5743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1045..1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        exon
4891..5253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  intron
912..1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: exon
LOCATION: 774..911
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE TYPE: leaf
IMMEDIATE SOURCE:
CLONE: lambda 3
                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN: Sam:
TISSUE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAMB/KEY:
LOCATION:
FLOCATION:
FLOCATION:
FLOCATION:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAMB/KEY:
NAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION:
LOCATION:
PEATURE:
NAME/KEY:
LOCATION:
FRATURE:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY:
LOCATION:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY:
LOCATION:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY:
LOCATION:
FEATURE:
NAME/KEY:
LOCATION:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION:
FEATURE:
NAME/KEY:
LOCATION:
FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY:
LOCATION:
FEATURE:
```

o or

cor

o or

```
LOCATION: (422)
OTHER INFORMATION: a, t, c or g
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAME/EXY: modified_base
OCATION: (370)
THER INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAME/KEY: modified_base
LOCATION: (400)
DIHER_INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCATION: (391)
THER INFORMATION: a, t, c or g
                                                                                                                                                                                  NAME/KEY: modified base
LOCATION: (343)...(346)
OTHER INFORMATION: a, t, c or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AME/KEY: modified base ocaTION: (372)...(375)
THER INFORMATION: a, t, c or
             NAME/KEY: modified base LOCATION: (335)..(338) OTHER INFORMATION: a, t, c FEATURE: MAME/KEY: modified base LOCATION: (341) OTHER INFORMATION: a, t, c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: (403)
OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: modified base
LOCATION: (349)..(350)
OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: modified_base
LOCATION: (379)
THER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: (406)..(408)
THER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OCATION: (358)
THER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: modified_base
LOCATION: (363)
THER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OCATION: (366)
THER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OCATION: (385)
THER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: modified base
LOCATION: (393)..(395)
THER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: modified_base
LOCATION: (352)
OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AME/KEY: modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                             MAME/KEY: modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AME/KEY: modified base
                                                                                                                                                                                           3093 TICCAAGAIGICAATITIAAATCITIAAATAAGGIAATITCAGAAAATAIIGIAATATAGIA 3034
                                                                                                                                                                                                                                                                             3033 GAAGGGCATTGATTTATCTAATATTTTAATAATAAGATTGTAGGGTCAGAAATAAT 2974
                                                                                                                                                                                                                                  132 AGAGGACAGGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAAAAAAGAGAGT 191
                                                                                                                                               72 ITGGAAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGTATAAACTGGGA
                                                                                                      0;
                                                           Query Match 5.9%; Score 40.8; DB 3; Length 6305; Best Local Similarity 54.7%; Pred. No. 0.065; Matches 81; Conservative 0; Mismatches 67; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 3
US-09-334-618A-8/C
| Sequence 8 Application US/09334818A
| Patent No. 6479267
| GENERAL INPORMATION:
| APPLICANT: DAVIS, MARIA
| APPLICANT: FULLER, CARL W.
| APPLICANT: FULLER, CARL W.
| APPLICANT: HANONE, JOSEPH A.
| APPLICANT: HANONE, LIN
| TITLE OF INVENTION: FY7 POLYMERASE
| FILE REFRENCES: BRBBATT
| CURRENT PAPLICATION NUMBER: US/09/334,818A
| CURRENT FILING DATE: 1999-06-17
| PRIOR PRILING DATE: 1998-06-17
| NUMBER OF SEQ ID NOS: 27
| SOFWWARE: Patentin Ver. 2.1
| SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                               2973 AGAAACAAAGAGCTGAAATGGCCAACA 2946
                                                                                                                                                                                                                                                                                                                      192 ATGAACAAGAGTGAGGAGATTATTAGCA 219
; OTHER INFORMATION: /label= putative US-08-687-580B-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEALURE:
NAME/KEY: modified_base
LOCATION: (304)
OTHER INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: modified_base
LOCATION: (332)
JTHER INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GOCATION: (312)
OTHER INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           O O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: modified_base
LOCATION: (266)
OTHER INFORMATION: a, t, c
FEATURE: NAME/KEY: modified_base
LOCATION: (293)
OTHER INFORMATION: a, t, c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: modified base LOCATION: (1) OTHER INFORMATION: a, t, FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCATION: (301)
OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COCATION: (299)
OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Thermus sp.
FEATURE:
                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                    ઠે
```

```
OTHER INFORMATION: a, t, c or g
                                                                                                 or g
                                                                                                                                                                                                              ION: (436)..(438)
INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ION: (491)
INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ION: (493) . (494)
INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                      or g
                                                                                                                                                                                                                                                                                                                                                                                                                 JOCATION: (448)
THER INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOCATION: (455) THER INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOCATION: (469)
THER INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OCATION: (479)
THER INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: modified base
LOCATION: (535)..(537)
OTHER INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: a, t, c or g
                                                                                                                                                             THER INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                               INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION: a, t, c or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION: a, t, c or g
                                                                                          THER INFORMATION: a, t, c
                                                                                                                                                                                                                                                                                                                                                  COCATION: (442)

THER INFORMATION: a, t, c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 THER INFORMATION: a, t, c
                                                                                                                          NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: modified base
                                                                                                                                                                                                 NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                            NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: modified_base
                                                             NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: modified base
NAME/KEY: modified_base
                                                                                                                                                                                                                                                                WAME/KEY: modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MAME/KEY: modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEY: modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: modified_base
                  OCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OCATION:
                                                                                 COCATION
                                                                                                                                                  CCATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OCATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COCATION
                                                                                                                                                                                                                 OCATION
```

```
296 GGGGTGGAAGGAAAAGGAGCCATGAATCAAAAGGTGGGAAAAAGGCCTTTTGGGAGGTGG 355
                                                                                                                                                                                                              416 GCCATTTCCTTTACAACAGAAATAACAGATTTCCCAGCCTCTAACCAAAGAACAACAAG 475
                                                                                                                                                                                                                                                                                                                                                                             476 TITGGGAACATICCTCTTCTGAAATATGAAAGAGAGGGGATAAATACTGGAGTAGGAT 535
                                                                                                                                                                                                                                                                                                                                                                                                                                                            295 GGGGGTGGAAGGAAAAGGAGCCATGAATCAAAAGGTGGGGAAAAAGGCCTTTTGGGAGGTG 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 65 RMRSRNRANRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRN 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   415 AGCCATTTCCTTTACAACAGAAATAACAGATTTCCCAGCCTCTAACCAAAGAAACAACAA 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                            .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17, Application US/09007005B
Patent No. 625858
GERREAL INFORMATION:
APPLICANT: Socstak, Jack W.
APPLICANT: Socstak, Richard W.
APPLICANT: ILU, Rihe
ITILE OF INVENTION: ENLECTION OF PROTEINS USING RNA-PROTEIN
ITILE OF INVENTION: FUSIONS
FILE REPERENCE: 00786/350003
CURRENT APPLICATION NUMBER: US/09/007,005B
CURRENT FILING DATE: 1998-01-14
EARLIER RPLING DATE: 1997-01-27
EARLIER RPLING DATE: 1997-01-27
SARLIER RPLING DATE: 1997-11-06
NUMBER OF SEQ ID NOS: 33
SOFTWARE: FRAEER FREEER FOR WINDOWS VERSION 4.0
SEQ ID NO 17
LENGTH: 289
                                                                                 Query Match 5.4%; Score 37.8; DB 4; Length 604; Best Local Similarity 37.5%; Pred. No. 0.16; Matches 102; Conservative 0; Mismatches 170; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 5.3%; Score 37; DB 3; Length 289; Best Local Similarity 8.4%; Pred. No. 0.19; Matches 23; Conservative 108; Mismatches 142; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     536 TGTGAAAAAGTCAAGAGAAAAAAAAAGAACA 567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            345 NINGINGANNINGANAAAAAAAAAAAAAAA 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Translation template
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: n = A,T,C or G
US-09-007-005-17
LOCATION: (551)..(552)
OTHER INFORMATION: a, t, c or g
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: RNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc_feature LOCATION: (1)...(289)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 4
US-09-007-005-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                   ò
                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

```
Patent No. 5695995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       295 GGGGGTGGAAGGAAAAGGAGCCATGAATCAAAAGGTGGGGAAAAGGCCTTTTGGGAGGTG 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        415 AGCCATTTCCTTTACAACAGAATAACAGATTTCCCAGCCTCTAACCAAAGAAACAACAA 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      125 RNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRN 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTTGGGAACATTCCTCTTCTGAAATATGAAAGAGGGGGATAAATACTGGAGTAGGA 534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    185 RNRSENRNRSENRNRSRNRNRSRNRNRSRCRARGRCRURGRCRGRURARARCRU 244
                                                                                       185 FNRSRNRNRSRNRNRSRNRNRSRNRNRSRNRNRSRCRARGRCRURGRCRGRURARARCRU 244
    125 RYRSENFARSENENESENENESENENESENENESENENESENENESENENESEN 184
                                                              475 GITITGGGAACAITCCICTICTGAAATATGAAAGAGAGGGGATAAATACTGGAGTAGGA 534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
                                                                                                                                                                                                                                                                                   US-SQUENCE 17. Application US/09244796

SQUENCE 17. Application US/09244796

PATENT NO. 6281344

GENERAL INPORMATION:
APPLICANT: SZOSTAK, JACK W.
APPLICANT: LOUR RICHARD W.
APPLICANT: LOUR RICHARD W.
TITLE OF INVENTION: SELECTION OF PROTEINS USING RNA-PROTEIN TITLE OF INVENTION: SELECTION OF PROTEINS USING RNA-PROTEIN TITLE OF INVENTION: SELECTION OF PROTEINS USING RNA-PROTEIN TITLE OF INVENTION: 1999-02-05

CURRENT FILING DATE: 1999-02-05

EARLIER APPLICATION NUMBER: 60/064,491

EARLIER FILING DATE: 1997-01-27

EARLIER FILING DATE: 1998-01-14

NUMBER OF SEQ ID NOS: 33

SOFTWARE: FREESCE for Windows Version 4.0

LENGTH: 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
5.3%; Score 37; DB 3; Length 289;
Best Local Similarity 8.4%; Pred. No. 0.19;
Matches 23; Conservative 108; Mismatches 142; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           245 RCRURURGRCRGRCRUAAAAAAAAAAAAAAA 277
                                                                                                                                                   535 TIGIGAAAAAGICAAGAGAAAAAAAAAAGAACA 567
                                                                                                                                                                              OTHER INFORMATION: Translation template
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 6
US-08-552-142A-1/c
; Sequence 1, Application US/08552142A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc_feature;
LOCATION: (1)...(289)
; OTHER INFORMATION: n = A,T,C or G
US-09-244-796-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: RNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                    g
                                                                                                                                                 à
                                                                                                                                                                                         ద
                                                                   ò
```

```
1767 aarircigracaaaraaaaaaaaaaaaaaaa 1708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              473 AAGTITGGGAACATTCCTCTTCTGAAATATGAAAGAGGGGATAAATACTGGAGTAG 532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1827 AAAATTGATGAAGCTGCATGGTTTTAAATAGGAAATCCACGTTATAAAAGTCATTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             533 GAITGIGAAAAAGICAAGAGAAAAAAAAAAAGAACAGCCCAAGIGIAACAGAIACIICICC
APPLICANT: Let, Jacqueline E. APPLICANT: Tapscott, Stephen J. APPLICANT: Tapscott, Stephen J. APPLICANT: Tapscott, Stephen J. APPLICANT: Tapscott, Stephen J. TITLE OF INVENTION: Neurogenic Differentiation (NeuroD) Genes TITLE OF INVENTION: and Proteins NUMBER OF SEQUENCES: 20 CORRESPONDENCES: ADDRESSE: ADDRESSE: Christensen O'Connor Johnson KindnessPLLC STREET: 1420 Fifth Avenue, Suite 2800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 2089;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 71; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 36.4; DB 1;
Pred. No. 0.74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1707 GCTGGTTGAAAAATATATATTTATATATAT 1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     593 ATGGGATGGTAAAAGGAAGTTATTTCAAT 622
                                                                                                                                                                                                                                                                                         COMPUTER: USA

ZIE: 99101-2347

COMPUTER READABLE FORM:
MEDIUM TYPE: 1Poppy disk

COMPUTER: 1BW PC compatible

COMPUTER: 1BW PC compatible

COMPUTER: 1BW PC compatible

COMPUTER: 1BW PC compatible

COMPUTER: 1BW PC compatible

COMPUTER: 1BW PC compatible

COMPUTER: 1BW PC compatible

CURRING APPLICATION DATA:

APPLICATION NUMBER: US 08/239,238

FILING DATE: 06-MAY-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: WO PCT/US95/05741

FILING DATE: 08-MAY-1995

ATTONNEY/AGENT INFORMATION:

NAME: BFOGGETCK, Thomas F:

REGISTRATION NUMBER: 31,332

REGISTRATION NUMBER: FHCR-1-8933

TELERPANE: 206-682-8100

TELERPANE: 206-682-8100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 7
US-08-910-973-1/c
; Sequence 1, Application US/08910973
; Patent No. 5795723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 52.7%;
Matches 79; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 206-225-0709
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2089 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Mus musculus FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleic acid
EDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDS
229..1302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                 Seattle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                   USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ), NAME/KEY:
, LOCATION:
US-08-552-142A-1
```

```
APPLICANT: Olson, James M.
TITLE OF INVENTION: Expression of Neurogenic bHLH Genes in Primitive Neuroectoder TITLE OF SEQUENCES: 24
CORRESPONDENCE ADDRESS: CARLSCENSESSEE: CALLSCENSEN O'CONNO. Johnson KindnessPLLC
STREET: 1420 Fifth Avenue, Suite 2800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1827 AAAATTGATGAAGCTGCATGGTTTTAAAATAGGAAATCCACGTTATAAAAAGTCATTAAA 1768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .767 ahiticichadahatcacaacaahahattcaccaragahacgicacagasaran 1708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  473 AAGITIIGGGAACAITCCICTICTICAAAIAIGAAAGAGAGGGGAIAAAIACIGGAGTAG 532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    533 GATTGTGAAAAAGTCAAGAGAAAAAAAAAAAGAACAGCCCAAGTGTAACAGATACTTCTCC 592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 4; Length 2089;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         71; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM: PC-DOS/MS-DOS
SOFFWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/499,227
FILING DATE: 05-August-1998
PRIOR APPLICATION NUMBER: US 08/239,238
FILING DATE: 06-May-1994
PRIOR APPLICATION NUMBER: WO PCT/US95/05741
FILING DATE: 06-May-1995
PRIOR APPLICATION NUMBER: WO PCT/US95/05741
FILING DATE: 06-May-1995
PRIOR APPLICATION NUMBER: WO PCT/US96/17532
FILING DATE: 00-May-1996
PRIOR APPLICATION NUMBER: US 08/910,973
FILING DATE: 00-Cocber-1996
PRIOR APPLICATION NUMBER: US 08/910,973
FILING DATE: 07-August-1997
ATTORNEY/ACRY INFORMATION:
NAME: Sheiness Diana K.
REFERENCE/DOCKET NUMBER: FHCR-1-12742
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELETRAR. 206-228-0310; 206-224-0735 (direct)
TELETRAR. 206-25-0779
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 2089 base pairs
TYPE: MUCHEL CALLOWERE: ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 2089 base pairs
TYPE: MUCHEL CALLOWERE: ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 2089 base pairs
TYPE: MUCHEL CALLOWERE: ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 2089 base pairs
TYPE: MUCHEL CALLOWERE: ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 2089 base pairs
TYPE: MUCHEL CALLOWERE: ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1: 1:
ACCOUNTY INFORMATION FOR SEQ ID NO: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Match 5.2%; Score 36.4; DB Local Similarity 52.7%; Pred. No. 0.74; nes 79; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1707 GCTGGTTGAAAATATATATTTATATATAT 1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               593 ATGGGATGGTAAAAAGGAAGTTATTTCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCT-US95-05741-1/c
; Sequence 1, Application PC/TUS9505741
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                  IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
Tapscott, Stephen J.
                                                                                                                                                                                                 CITY: Seattle
STATE: WA
COUNTRY: USA
ZIP: 98101-2347
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDS
229..1302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear
MOLECULE TYPE: CDNA
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                               OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 , NAME/KEY:
, LOCATION:
US-09-499-227-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                               APPLICANT: Tapscott, Stephen J.
APPLICANT: Olson, James M.
TITLE OF INVENTION: Expression of Neurogenic bHLH Genes in Primitive Neuroectoder NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Christensen O'Connor Johnson KindnesspillC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1767 AATTCTGTACAAAATCACAACAAATAATTCAGCATGGGAAAGGTCACAGGTAGTAAAAT 1708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  533 GATTGTGAAAAAGTCAAGAGAAAAAAAAAAGAACAGCCCAAGTGTAACAGATACTTCTCC 592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 5.2%; Score 36.4; DB 1; Length 2089; Best Local Similarity 52.7%; Pred. No. 0.74; Matches 79; Conservative 0; Mismatches 71; Indels 0
                                                                                                                                                                           3: Christensen O'Connor Johnson KindnessPLLC 1420 Fifth Avenue, Suite 2800
                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: LONG TENDER OF COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/910,973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Sheines, Diana K.
REGISTRATION NUMBER: 35,356
REFERENCE/DOCKET NUMBER: FHCR-1-10958
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-622-8100; 206-224-0735 (direct)
TELEFAX: 206-225-0779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1707 GCTGGTTGAAAATATATTTTTÄTATATA 1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         593 ATGGGATGGTAAAAGGAAGTTATTTCAAT 622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 8
10S-09-499-227-1/c
'Sequence 1, Application US/09499227
', Patent No. 6444463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS: LENGTH: 2089 base pairs
                                                                                                                                                                                                                                                                                                                                                                                        Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                COUNTRY: USA
ZIP: 98101-2347
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDS
229..1302
      SENERAL INFORMATION:
                                                                                                                                                                                    ADDALL
STREET: 142.
TTY: Seattle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; NAME/KEY:
; LOCATION:
US-08-910-973-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
```

Gaps . 0

GENERAL INFORMATION

```
AARMWWR 4
                                                                                                     ; NAME/KEY: CDS
; LOCATION: 235..399
US-09-621-976-2813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 1
LENGTH: 1664976
SEQ ID NO 2813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1767 AATTCTGTÄCAAAATCACAACAAAATTCAGCATGGGAAAGGTCACAGGTAGTAAAAT 1708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1827 AAAATTGATGAAGCTGCATGGTTTTAAATAGGAAATCCACGTTATAAAAGTCATTAAA 1768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      473 AAGTITGGGAACATICCTCTTCTGAAATATGAAAGAGAGGGGATAAATACTGGAGTAG 532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        533 GATTGTGAAAAAAGTCAAGAGAAAAAAAAAAGAACAGCCCAAGTGTAACAGATACTTCTCC 592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
             APPLICANT: Lee, Jacqueline E.
APPLICANT: Tapscott, Stephen J.
APPLICANT: Tapscott, Stephen J.
APPLICANT: Hollenberg, Stanley M.
TITLE OF INVENTION: Neurogenic Differentiation (NeuroD) Gene
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 5.2%; Score 36.4; DB 5; Length 2089; Best Local Similarity 52.7%; Pred. No. 0.74; Matches 79; Conservative 0; Mismatches 71; Indels 0;
                                                                                                                                                                       3: Christensen O'Connor Johnson Kindness
1420 Fifth Avenue, Suite 2800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Jobert, S.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: ESTS and Encoded Human Proteins.
FILE REPERENCE: GENEST: 0.54PR2
CURRENT APPLICATION NUMBER: US/09/621,976
CURRENT FILING DATE: 2000-07-21
                                                                                                                                                                                                                                                                        ZONIAL SHOOL-2347

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/05741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1707 GCTGGTTGAAAAATATATATTATATAT 1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             593 ATGGGATGGTAAAAGGAAGTTATTTCAAT 622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: Broderick, Thomas F.
REGISTRATION NUMBER: 31,332
REPERENCE/DOCKET NUBER: FHCR-1-8504
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-682-8100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2813, Application US/09621976
Patent No. 6639063
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 206-225-0709
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 2089 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 19335
SOFTWARE: Patent pm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDS
229..1302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                Abb...
STREET: 14...
ATTY: Seattle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
US-09-621-976-2813/c
                                                                                                                                                                                                                                                            USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                           ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCT-US95-05741-1
    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
```

```
Sequence 1, Application US/08916421B

Facent No. 6503729
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICAMY: Bull et al.
TITLE OF INVENTION: Complete Genome Sequence of the Methanogenic Archaeon, Methanococc
TITLE OF INVENTION: jannaschii
FILE REFRENCE: PB275
TITLE OF INVENTION: 1987-08-22
CURRENT FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 3
SOFTWARE: PatentIn Version 3.1
SOFTWARE: PatentIn Version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              339 GGCCTTTTTGGGAGGTGGCAGTGTGGGTA-GGGAGTAGGGCTCCGGTTAGAATACATGGAT 397
                                                                                                                                                                                                                                                                                                                                                                                                                           219 AGTGACCTTTGAGAGTACATCTCTAGAGTGGTATGTGTAGAGCCAGATTTTCAGCATCAG 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        398 GAAAGAAAGGTGAGCACAGCCATTTCCTTTACAACAGAAATAACAGATTTCCCAGCCTCT 457
                                                                                                                                                                                                                                                                                                                                                         310 WYMWKRWMSTRHYCYMCWKCCMYRGRRCAWYTWARGRWMSYAWGKWKSMRSAMSMCTRMY 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                              250 YKKGSTYWTWKCTCATWCYWYWKYWKRWWSKTCWSGSRGGYMTSYTSTRSYSMYWASWWY 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      279 AACCATCAAGCATTTTGGGGGGGGAAGGAAAGGAGCCATGAATCAAAAGGTGGGGAAAA 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      190 IMCWWWGRWWSIYWYNAWGKKWWRYATTWRRAMMWWAWTMWWAWCMSSRGAAMY 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10 MARACHITEYNEWWANAMWANWWINIMMYKYWIWRAMKRRWMWRKWRSWSWMWAWGMIRW 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                159 ATATTTAAGGACTGGGTAGAAAAAAAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGC
                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                               DB 4; Length 832;
                                                                                                                                                                                                         Query Match
5.2%; Score 36.2; DB 4; Length 8.
Best Local Similarity 11.1%; Pred. No. 0.54;
Matches 34; Conservative 147; Mismatches 125; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         o
เ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ບັ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Methanococcus jannaschii
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: (84773)...(84773)
COCHER INFORMATION: n equals a, t,
NAME/KEY: misc feature
LOCATION: (84808)...(84808)
OTHER INFORMATION: n equals a, t,
NAME/KEY: misc feature
LOCATION: (84812)...(84812)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEX: misc_feature
LOCATION: (28222). (28222)
OTHER INFORMATION: n equals a, t.
NAME/KEX: misc feature
LOCATION: (28257)..(28258)
OTHER INFORMATION: n equals a, t.
NAME/KEX: misc feature
LOCATION: (84773)..(84773)
LENGTH: 832
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         458 AACCAAA 464
```

 ∞

or ö ö ö o ò or ö NAME/KEYN: MISC feature
LOCATION: (234187)
LOCATION: (234187)
LOCATION: (234187)
LOCATION: (2342187)
LOCATION: (234220)
LOCATION: (234220)
LOCATION: (234814)
LOCATION: (234814)
LOCATION: (234814)
LOCATION: (234814)
LOCATION: (309398)
LOCATION: (309398)
LOCATION: (309398)
LOCATION: (309398)
LOCATION: (309418)
LOCATION: (309418)
LOCATION: (3109418)
LOCATION: (312837)
LOCATION: (312837)
LOCATION: (312837)
LOCATION: (312837)
LOCATION: (312837)
LOCATION: (312837)
LOCATION: (312826)
LOCATION: (31226)
LOCATION: (31226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226)
LOCATION: (319226) ö NAME/KEY: misc_feature
LOCATION: (163385).(163385)
OTHER INFORMATION: n equals a, t, c,
NAME/KEY: misc_feature
LOCATION: (191589).(191989)
OTHER INFORMATION: n equals a, t, c,
NAME/KEY: misc_feature
LOCATION: (191995).(191995)
OTHER INFORMATION: n equals a, t, c,
OTHER INFORMATION: n equals a, t, c, υÌ NAME/KEY: miscreaure control of the LOCATION: (98120). (98120)
OTHER INFORMATION: n equals a, t, c, NAME/KEY: misc feature
LOCATION: (98159). (98159)
OTHER INFORMATION: n equals a, t, c, NAME/KEY: misc feature
LOCATION: (98239). (98239)
OTHER INFORMATION: n equals a, t, c, OTHER INFORMATION: n equals a, t, c JAFRA INCOMENTATION (559241)
COCATION: (559241)
OTHER INFORMATION: n equals a, t, NAMEN'KEY: misc feature LOCATION: (600992)..(600992) OTHER INFORMATION: n equals a, t, ANNE/KEY: misc feature OCATION: (231980)..(231980) THER INFORMATION: n equals a, t, NAME/KEY: misc_feature LOCATION: (622708)..(622708) OTHER INFORMATION: n equals a, t, NAME/KEY: misc feature LOCATION: (657081)..(657081) OTHER INFORMATION: n equals a, t, HER INFORMATION: n equals a, t, ME/KEY: misc feature OCATION: (98120)

CITIER INFORMATION: n equals a, t, c, or g
NUMEY (EXT: masc feature quals a, t, c, or g
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (EXT: masc feature)
NUMEY (E

DB 4; Length 1664976;

5.2%; Score 36.2; I 50.9%; Pred. No. 21;

Query Match Best Local Similarity

```
1181 AATTTGACTCTACAAGAAAAAGTAGCTATGGCTGAAAAAAGTGTAGAAGATGTTCAACAG 1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1241 cadararrdacadcreadadecacaaarcaagaarardecaaggarderreadgarrrdead 1300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1301 AACAGATCAACCTTAAAAGAAGAAGAAATTAAAGAAATCACATCTTCATTTCTTGAGAAA 1360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1361 ATAACTGATTTGAAAAATCAACTCAGACAAGATGAAGACTTTAGGAAGCAGCTGGAA 1420
                                                                              1297 ATAACTGATTTGAAAAATCAACTCAGACAACAAGATGAAGACTTTAGGAAGCAGCTGGAA 1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     290 AITITIGGGGGTGGAAAAGGAAAGCCCATGAATCAAAAGGTGGGGAAAAGGCCTTTTGGG 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      350 AGGIGGCAGIGIGGGIAGGGAGIAGGGCICCGGTIAGAAIACAIGGAIGAAAGAAAGGIG 409
           470 AACAAGITIGGGAACATICCTCTTCTGAAATATGAAAGAGAGGGGATAAATACTGGAG 529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      470 AACAAGITITGGGAACATICCTCTTCTGAAATATGAAAGAGAGGGGATAAATACTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    410 AGCACAGCCATTTCCTTTACAACAGAAATAACAGATTTCCCAGCCTCTAACCAAAGAAAC
                                                                                                                                                                                                                            1357 GAGAAAGGAAAAAGAAAGGAAAGAAAATGTAATGACAGAATTAACCA 1408
                                                                                                                                                                 530 TAGGATTGTGAAAAAGTCAAGAGAAAAAAAAAAAGAACAGCCCAAGTGTAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 45.2%; Pred. No. 0.92;
Matches 132; Conservative 0; Mismatches 160; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: TURLEY, EVA A.
APPLICANT: SHUWEN, ZHANG
APPLICANT: SHUWEN, ZHANG
APPLICANT: BYFWISTLE, JOYCELYN
TITLE OF INVENTION: HYALURONAN RECEPTOR PROTEIN
NUMBER OF SEQUENCES: 60
CORRESPONDENCE ADDRESS:
ADDRESSEE: FISH & NEAVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
SOFTWARE: Patentin Rel. #1.0, ASCII
CURRENT APPLICATION DATA:
BAPLICATION NUMBER: US/08/477,831C
FILING DATE: 07-UNW-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: PIERRI, MARGARET A.
REGISTRATION NUMBER: 30,709
REFERENCE/DOCKET NUMBER: SIM-10
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-596-9000
TELEFRAX: 212-596-9000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1251 AVENUE OF THE AMERICAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 1251 AVENUE OF THE AMERICY
CITY: NEW YORK
STATE: NEW YORK
COUNTRY: U.S.A.
ZIP: 10020-1104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPACIBLE
COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM PC COMPUTER: IBM 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INPOMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 1885 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: ODNA
DESCRIPTION: /desc = "RHAMM IB"
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 9, Application US/08477831C
Patent No. 6429291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-477-831C-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                            셤
                                                                                              ద
                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                       751076 AGATAAAATTTTAAACAGAAAAGAGAAAAAATGCATAATATATTTAAACTCTTAATTT 751017
                                                                                                                                     1176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .237 Aacadatcaaccitaaaadaadaadaahtraaddaaricacatcitcattrcrtgagaa 1296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1177 cagatatrigacagctgagagcacaaarcaagaaratgcaaggarggriggricaagatrigcag 1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             410 AGCACAGCCATTTCCTTTACAACAGAAATAACAGATTTCCCAGCCTCTAACCAAAGAAAC 469
                                                                  476 TITGGGAACATICCICTCTCTGAAATAIGAAAGAGAGAGAATAATACTGGAGTAGGAI 535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1117 ABTTTGACTCTACAAGAAAAGTAGCTATGGCTGAAAAAGTGTAGAAGATGTTCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               290 ATTITGGGGGGGGAAAAGGAGAGCCATGAATCAAAAGGTGGGGAAAAAGCCCTTTTGGG
                                                                                                                                                                                                                536 TGTGAAAAAGTCAAGAGAAAAAAAAAAAGACAGCCCAAGTGTAACAGATACTTCTCCATG
0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                         751016 GGAGGCGATTAACCGAGTTATAACTAAGGTTTCTTACTTTTTAATGGGT 750968
                                                                                                                                                                                                                                                                                                                                                                      596 GGATGGTAAAAGGAAGTTATTTCAATAAAATGACCCCTTGGAAGGAGT 644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 5.2%; Score 36; DB 4; Length 1821; Best Local Similarity 45.2%; Pred. No. 0.91; Matches 132; Conservative 0; Mismatches 160; Indels
Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cDNA
/desc = "RHAMM I cDNA (coding region)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/08477831C
Sequence 1, Application US/08477831C
Patent No. 6429291
GENERAL INFORMATION:
TURLEY, EVA A.
APPLICANT: SHUWEN, ZHANG
APPLICANT: SHUWEN, ZHANG
APPLICANT: SHUWEN, ZHANG
APPLICANT: SHUWEN, ZHANG
CORRESPONDENCES: 60
CORRESPONDENCES: 60
CORRESPONDENCE ADDRESS:
ADDRESSEE: FISH & NEAVE
STREET: 1251 AVENUE OF THE AMERICAS
COUNTRY: NEW YORK
COUNTRY: U.S.A.
83;
   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: NEW YOAK.
COUNTRY: U.S.A.
ZIP: 10020-1104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PALENTIN NO.
SOFTWARE: PALENTIN NO.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/477,831C
FILING DATE: 07-JUN-1995
CLASSIFICATION: 514
ATTORNEY,AGENT INFORMATION:
NAME: PIERRI, MARGARET A.
REGISTRATION NUMBER: 30,709
REFERENCE/DOCKET NUMBER: SIM-10
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS: LENGTH: 1821 base pairs TYPE: mucleic acid STRANDEDNESS: single
   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: lin
MOLECULE TYPE:
DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-477-831C-1
   86;
       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                     a
                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                              ò
```

```
d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1192 AATTTGACTCTACAAGAAAAGTAGCTATGGCTGAAAAAGTGTAGAAGATGTTCAACAG 1251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1252 CAGATATTGACAGCTGAGAGCACAAATCAAGAATATGCAAGGATGGTTCAAGATTTGCAG 1311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1312 AACAGATCAACCTTAAAAGAAGAAGAAATTAAAGAAATCACATCTTCATTTCTTGAGAAA 1371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1372 ATAACTGATTTGAAAATCAACTCAGACAACAAGATGAAGACTTTAGGAAGCAGCTGGAA 1431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           350 AGGTGGCAGTGTGGGTAGGGAGTAGGGCTCCGGTTAGAATACATGGATGAAAGAAGGTG 409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       410 AGCACAGCCATTTCCTTTACAACAGAATAACAGATTTCCCAGCCTCTAACCAAAGAAAC 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       470 AACAAGTTTGGGAACATTCCTCTCTTCTGAAATATGAAAGAGAGGGGATAAATACTGGAG 529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              290 ATTITIGGGGGGGGAAGGAAAAGGAGCCATGAATCAAAAGGTGGGGAAAAGGCTTTTTGGG
                                           1421 GAGAAAGGAAAAAGAACAGCAGAGAAAGAAAATGTAATGACAGAATTAACCA 1472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1432 GAGAAAGGAAAAAGAACAGCAGAGAAAGAAATGTGATGACAGAATTAACCA 1483
530 TAGGATTGTGAAAAAGTCAAGAGAAAAAAAAAAGAACAGCCCAAGTGTAACA 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      530 TAGGATTGTGAAAAAGTCAAGAGAAAAAAAAAGAACAGCCCAAGTGTAACA 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
5.2%; Score 36; DB 4; Length 1896;
Best Local Similarity 45.2%; Pred. No. 0.93;
Matches 132; Conservative 0; Mismatches 160; Indels
                                                                                                                                                            Sequence 10, Application US/08477831C
Patent No. 6422291
GENERAL INFORMATION:
APPLICANT: TURLEY, EVA A.
APPLICANT: SHUWEN, ZHAAN
APPLICANT: HUWENIN, JANCELYN
TITLE OF INVENTION: HYALURONAN RECEPTOR PROTEIN
NUMBER OF SEQUENCES: 60
CORRESCEDINDENCE ADDRESS:
ADDRESSEE: FISH & NEAVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
SOFTWARE: Patentin Rel. #1.0, ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/477,831C
FILING DATE: 07-UTW-1995
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                             STREET: 1251 AVENUE OF THE AMERICAS CITY: NEW YORK STATE: NEW VORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: cDNA
DESCRIPTION: /desc = "RHAMM I-2a"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: PIERRI, MARGARET A.
REGISTRATION NUMBER: 30,709
REFERENCE/DOCKET NUMBER: SIM-10
TELECOMINICATION:
TELEPHONE: 212-596-9000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 212-596-9090
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 1896 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: U.S.A.
ZIP: 10020-1104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy di
COMPUTER: IBM PC compa
                                                                                                                                                                                                                                                                                                                                                                                                                                                          NEW YORK
: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-477-831C-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                           g
ò
```

```
1377 AACAGATCAACCTTAAAAGAAGAAGAAATTAAAGAAATCACATCTTCATTTCTTGAGAAA 1436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1437 ATAACTGATTTGAAAATCAACTCAGACAACAAGATGAAGACTTTAGGAAGCAGCTGGAA 1496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   410 AGCACAGCCATTTCCTTTACAACAGAAATAACAGATTTCCCAGCCTCTAACCAAAGAAAC 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1257 AATTTGACTCTACAAGAAAAGTAGCTATGGCTGAAAAAGTGTAGAAGATGTTCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           350 AGGIGGCAGIGIGGGIAGGGAGIAGGGCICCCGGITAGAAIACAIGGAAGAAAGGIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1317 CAGATATTGACAGCTGAGAGCACAAATCAAGAATATGCAAGGATGGTTCAAGATTTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        290 ATTITGGGGGGGAAGGAAAGGAGCCATGAATCAAAAGGTGGGGAAAAAGGCCTTTTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       530 TAGGATTGTGAAAAAGTCAAGAGAAAAAAAAAAGAACAGCCCAAGTGTAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 4; Length 1961;
            Sequence 8, Application US/08477831C
Patent No. 642921
GENERAL INFORMATION
APPLICANT: TUTLE, EVA A.
APPLICANT: ENTWIN, ZHANG
APPLICANT: ENTWISTLE, JOYCELYN
TITLE OF INVENTION: HYALURONAN RECEPTOR PROTEIN
NUMBER OF SEQUENCES: 60
CORRESPONDENCE ADDRESS:
ADDRESSEE: FISH & NEAVE
STREET: 1251 AVENUE OF THE AMERICAS
CITY: NEW YORK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.2%; Score 36; DB 4; Le 45.2%; Pred. No. 0.94; cive 0; Mismatches 160;
                                                                                                                                                                                                                                                                                                                                                    CITY: NEW YORK
COUNTRY: U.S.A.
ZIP: 10020-1104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Rel. #1.0, ASCII
CURRENT APPLICATION DATA: US/08/477,831C
FILING DATE: 07-UN-1995
CLASSIFICATION: 514
ATTCNEY/AGENT INFORMATION:
NAME: PIERRI, MARGARET A.
REGISTRATION NUMBER: 30,709
REPERENCY/COMPONITATION:
TELECOMMUNICATION:
TELECOMMUNICATION:
TELECOMMUNICATION:
TELECOMMUNICATION:
TELECOMMUNICATION:
TELECOMMUNICATION:
TELECOMMUNICATION:
TELECOMMUNICATION:
TELECOMMUNICATION:
TELECOMMUNICATION:
TELECOMMUNICATION:
TELECOMMUNICATION:
TELECOMMUNICATION:
TELECOMMUNICATION:
TELECOMMUNICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Search completed: April 26, 2004, 02:11:00 Job time : 40.5277 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ) MOLECULE TYPE: CDNA
) DESCRIPTION: /desc = "RHAMM IA"
US-08-477-831C-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 212-596-9090
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 45.2
Matches 132; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: nucleic acid
STRANDEDNESS: sing
TOPOLOGY: linear
US-08-477-831C-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
```

```
Mon Apr 26 09:48:36 2004
```

1/2-

GenCore versio Copyright (c) 1993 - 2004 eic - nucleic search, using sw model	
Run on: April 24, 2004, 23:47:42 ; Search time 184.93 Seconds (without alignments) 15988.422 Million cell updates/sec	
Title: Perfect score: 696 Sequence: 1 taaaatatctgataggcagtttttgaaaaatatataaaat 696	
Scoring table: IDENTITY_NUC Gapop 10.0 , Gapext 1.0	
Searched: 3373863 seqs, 2124099041 residues	
Total number of hits satisfying chosen parameters: 6747726	
Minimum DB seq length: 0 Maximum DB seq length: 200000000	
Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries	
Database: N Geneseq_29Jan04:* 1: geneseqn1980s:* 2: geneseqn2000s:* 3: geneseqn2000s:* 5: geneseqn2001as:* 6: geneseqn2001bs:* 7: geneseqn2001as:* 8: geneseqn2002s:* 9: geneseqn2003s:* 10: geneseqn2004s:*	

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Query Match Length DB Result

Human imm Rice gene Probe #13 Human foe Probe #17 Human bre Human bra Human bra Human gen Human gen Human gen Human gen Human gen Human gen Human gen Human gen Human ang Human imm Chemicall Murine P2 Human imm Chemicall Human gen Prokaryot Human ner Нитап ітт Description Aak77679 Ab132295 Ab132295 Ab132295 Ab132295 Aa123067 Aa123067 Aa126373 Ab2641903 Ab26421903 Ab2642175 Ab1313696 Ab13125 Ab1313696 Ab13125 Ab1313125 SUMMARIES ADA71938
AA123067
AA123067
AA148373
ABA50219
AAK1903
ABK1903
ABS16449
ABS16449
AAK96127
ABL33696
AAK133696
AAK133696
AAK133696
AAK133696
AAK133696
AAK133696
AAK133696
AAK133696
AAK133696
AAK133696
AAK133696 32249 32249 6319 6319 6681 6681 46358 10048

υυ

Abv98460 Human pan Aba08927 Human nov Aal00184 Human rep Aad68343 Chicken s Abz20626 Human cvt			Ab134357 Human ımm Abq25179 Oligonucl Abq25178 Oligonucl Abk40042 Human che	Aa845346 Chemicall Abk28179 DNA trans Ab133033 Human imm Ada02561 Mouse Ras Adb72299 Mouse Ras Abv98193 Human pan
ABV98460 ABA08927 AAL00184 ADD68343	6 ABZ11445 4 AAH15366 5 ABX71418 6 AB133194		6 ABL34357 6 ABQ25179 6 ABQ25178 6 ABK40042	4 AAS45346 6 ABK28179 6 ABL33033 8 ADA02561 9 ADB72299 6 ABV98193
657 4 699 4 857 9				
លល់ល់លំលំ	ក្រហល ក្រហល់ ក្រហល់	ຸ ທຸທຸທຸ ທຸທຸທຸ	დ დ დ დ 4. 4. 4. 4.	លលលលល ឯឯឯឯឯឯ
60 60 60 60 60 60 60 60 60 60 60 60 60 6	. 4. 4. 4. 4.	3 8 8 8 8 8 1 4 4 8 1 4 4 8	37.8 37.6 37.6	37.6 37.6 37.6 37.6
4 5 5 5 6 5 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	30 33 33 33 33 33 33 33 33 33 33 33 33 3	1 M M M	ი ი ი გოკე	य य य य य य

ALIGNMENTS

RESULT 1 AAK77679/c ID AAK77679 standard; DNA; 17947 BP.

Human; immune; haematopoietic; immune/haematopoietic antigen; cancer; cytostatic; gene therapy; vaccine; metastasis; ds. Human immune/haematopoietic antigen genomic sequence SEQ ID NO:32491. 04 FEB-2000; 20000S-0180628P.
24-FEB-2000; 20000S-0184664P.
02-MAR-2000; 20000S-0189634P.
15-MAR-2000; 20000S-018913P.
17-MAR-2000; 20000S-0199123P.
19-MAY-2000; 20000S-0199123P.
19-MAY-2000; 20000S-0209467P.
07-JUN-2000; 2000US-021513SP.
07-JUL-2000; 2000US-021513SP.
07-JUL-2000; 2000US-021688PP.
11-JUL-2000; 2000US-021748PP.
11-JUL-2000; 2000US-021748PP.
11-JUL-2000; 2000US-021748PP.
11-JUL-2000; 2000US-021748PP.
11-JUL-2000; 2000US-021748PP.
11-JUL-2000; 2000US-021748PP.
11-JUL-2000; 2000US-021748PP.
11-JUL-2000; 2000US-021748PP.
14-JUL-2000; 2000US-021748PP. 2000US-0224519P. 17-JAN-2001; 2001WO-US001354 07-NOV-2001 (first entry) WO200157182-A2 Homo sapiens. 09-AUG-2001 AAK77679;

```
PR 14-AUG-2000, 2000UG-0225579P.
PR 14-AUG-2000, 2000UG-0225579P.
PR 14-AUG-2000, 2000UG-0225579P.
PR 14-AUG-2000, 2000UG-0225679P.
PR 12-AUG-2000, 2000UG-0225679P.
PR 22-AUG-2000, 2000UG-0226679P.
PR 22-AUG-2000, 2000UG-0226679P.
PR 22-AUG-2000, 2000UG-022679P.
PR 22-AUG-2000, 2000UG-022679P.
PR 22-AUG-2000, 2000UG-022934P.
PR 01-SEP-2000, 2000UG-022934P.
PR 01-SEP-2000, 2000UG-022934P.
PR 01-SEP-2000, 2000UG-022934P.
PR 01-SEP-2000, 2000UG-022934P.
PR 01-SEP-2000, 2000UG-022934P.
PR 01-SEP-2000, 2000UG-022934P.
PR 01-SEP-2000, 2000UG-022934P.
PR 01-SEP-2000, 2000UG-022934P.
PR 01-SEP-2000, 2000UG-022934P.
PR 01-SEP-2000, 2000UG-022934P.
PR 01-SEP-2000, 2000UG-022934P.
PR 01-SEP-2000, 2000UG-022934P.
PR 01-SEP-2000, 2000UG-022934P.
PR 01-SEP-2000, 2000UG-022939P.
PR 01-SEP-2000, 2000UG-02239P.
PR 01-SEP-2000, 2000UG-02239P.
PR 01-SEP-2000, 2000UG-02239P.
PR 01-SEP-2000, 2000UG-02239P.
PR 01-SEP-2000, 2000UG-02239P.
PR 01-SEP-2000, 2000UG-02239P.
PR 01-SEP-2000, 2000UG-02239P.
PR 01-SEP-2000, 2000UG-02239P.
PR 01-SEP-2000, 2000UG-02239P.
PR 01-SEP-2000, 2000UG-02239P.
PR 14-SEP-2000, 2000UG-02239P.
PR 14-SEP-2000, 2000UG-02239P.
PR 14-SEP-2000, 2000UG-02239P.
PR 14-SEP-2000, 2000UG-02239P.
PR 14-SEP-2000, 2000UG-02239P.
PR 14-SEP-2000, 2000UG-02239P.
PR 14-SEP-2000, 2000UG-02239P.
PR 14-SEP-2000, 2000UG-02239P.
PR 14-SEP-2000, 2000UG-02239P.
PR 14-SEP-2000, 2000UG-02239P.
PR 14-SEP-2000, 2000UG-02239P.
PR 14-SEP-2000, 2000UG-02239P.
PR 14-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-0239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
PR 25-SEP-2000, 2000UG-02239P.
P
```

```
PR 08-NOW-2000; 200018-0246532P.
PR 08-NOW-2000; 200018-0246532P.
PR 08-NOW-2000; 200018-0246512P.
PR 08-NOW-2000; 200018-0246512P.
PR 08-NOW-2000; 200018-024512P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-0245312P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-024544P.
PR 17-NOW-2000; 200018-
```

Gaps

Query Match

98.0%; Score 681.8; DB 4; Length 17947;

Best Local Similarity 99.6%; Pred. No. 2.6e-177;

Matches 694; Conservative 0; Mismatches 2; Indels 1;

g

8 6

ò g %

g δ 셤 ò g δ 유 ò a ò g . 5

```
Nucleic acid comprising fragment of chemically modified gene, useful diagnosis and treatment of diseases associated with abnormal cytosine
                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 268; 32pp + Sequence Listing; German
                                                                                                                                                                   ÿ
                                                                                                                                                                     Berlin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВÞ
                                                                      30-JUN-2000; 2000DE-01032529.
01-SEP-2000; 2000DE-01043826.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 49.2
Matches 118; Conservative
                                                                                                                                                                   Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADA71938 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rice gene, SEQ ID 5263
                                                                                                                               (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                       WPI; 2002-130909/17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003000898-A1
                                  02-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oryza sativa.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-NOV-2003
                                                                                                                                                                                                                                                                                  methylation
03-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADA71938;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                     Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADA71938
  5X4X4X4X1X4X4T44X8X2CCCCCCCCCX8X4T44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                           ATAAACTGGGGAGGACAGAGGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAA 10318
                                                                                                                                                                                                                                                                                                                                                                                                                          10437 GCGATACAGACTTGGAAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGT 10378
                                                                                                                                                                                                                                                                              AACAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGCAGTGACCTTTGAGAGTACATCT 10258
                                                                                                                                                                                                                                                                                                                                                           .0257 CTAGAGTGGTATGTGTAGAGCCAGATTTTCAGCATCAGAACCATCAAGCATTTTGGGGGT 10198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10077 ITCCTTTACAACAGAATAACAGATTTCCCAGCCTCTAACCAAAGAAACAACAAGTTTGG 10018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10017 GAACATTCCTCTTCTGAAAAATATGAAAAGAGAGGGAAAAAATACTGGAGTAGGATTGTGA 9958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9897 GGTAAAAAGGAAGTTATTTCAATAAAATGACCCCTTGGAAGGAGTTCAAAACAGGTTGCC 9838
                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                     ATAAACTGGGAAGAGGACAGAGGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAA 180
                                                                                                                                                                                                                                              AACAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGCAGTGACCTTTGAGAGTACATCT 240
                                                                                                                                                                                                                                                                                                                                                                                                 GGAAGGAAAAAGGAGCCATGAATCAAAAGGTGGGGAAAAAGGCCTTTTGGGAGGTGGCAGTG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAAAGTCAAGAG-AAAAAAAAAAGAACAGCCCAAGTGTAACAGATACTTCTCCATGGGAT 599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600. GGTAAAAAGGAAGTTATTTCAATAAAATGACCCCTTGGAAGGAGTTCAAAACAGGTTGCC 659
                    Human; immune system disease; cytosine methylation; antiasthmatic; antianteriosclerotic; antianemnic; cytosetatic; nootropic; neuroprotective; anti-HIV; anticonvulsant; ophthalmologici; antirheumatic; antiarthritic; antidiabetic; antipsoriatic; antifammatory; cancer; eye disease; arteriosclerosis; anaemia; antientlammatory; cancer; eye disease; atteriosclerosis; anaemia; acute myeloid leukaemia; Albeimer's disease; AIDS; epilepsy; neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease; gene;
                                                                                                                                                                                                                                                                                                                         CTAGAGTGGTATGTGTAGAGCCAGATTTTCAGCATCAGAACCATCAAGCATTTTGGGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCCTTTACAACAGAATAACAGATTTCCCAGCCTCTAACCAAAGAAACAAGTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATAIGCITIAIGIGGAGITITIGAAAAATAIATAAAAT 9801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human immune system associated gene SEQ ID NO: 268.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATGCTTTATGTGGAGTTTTGAAAATATATAAAAT 696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABL32295 standard; DNA; 9415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-MAR-2002 (first entry)
                                                                                                                                                                                                       10377
                                                                                                                                                                                                                                                                                  10317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9837
                    ч
                                                                                            61
                                                                                                                                                                     121
                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABL32295
```

g ઠે a ò 셤

```
The present invention provides a number of human immune system associated genes which are modified by the methylation of cytosines. The sequences can be used in the diagnosis and treatment of immune system disorders, including eye diseases such as retinopathy, neovascular glaucoma and macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid thetaman, Alzhaimer's disease, AnDs, epilepsy, neurofibromatosis, rhemmatoid arthritis, psoriasis and inflammatory/ulcerative bowel diseases. The present sequence is a gene of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                       387 AATACATGGATGAAAGAAAGGTGAGCACAGCCATTTCCTTTACAACAGAAATAACAGTT
                                                                                                                                                                                                                                                                                                                                                                              567 AGCCCAAGTGTAACAGATACTTCTCCCATGGGATGGTAAAAAGGAAGTTATTTCAATAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Plant, bacterial infection, fungal infection, viral infection, rice, gene, ds.
                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                              Sequence 9415 BP; 1906 A; 297 C; 2611 G; 4601 T; 0 U; 0 Other;
                                                                                                                                                                                                                      Length 9415;
                                                                                                                                                                                                                                                         0; Mismatches 122; Indels
                                                                                                                                                                                                                    6.4%; Score 44.8; DB 6; 49.2%; Pred. No. 0.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-JUN-2001; 2001WO-IB001105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-JUN-2001; 2001WO-IB001105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3-JAN-2003
```

WO200200928-A2

Homo

```
Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63
                                                                                                                            AAI23067;
         907
                               662
                                                                                             AAI23067,
                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                               g
                              ઠે
                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                         The present invention relates to a method (MI) for identifying genes involved in plant resistance or response to pathogenic infection. MI comprises identifying a gene whose expression is significantly altered in the incompatible interaction of plant gene expression relative to expression of the gene in an uninfected plant, in a mutant plant that does not express a gene associated with response to pathogenic infection, or in a corresponding incompatible or compatible interaction. (MI) is useful for conferring resistance to resistance or tolerance to a plant to bacterial, fungal or viral infection. The present sequence was used to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              846
                                                                                                                                                                                                                                                                                                                                                                                                                                              GCRGCMTCRMKSYGWIRWKSWKRMASKYKWMSRNYRWRKKKCSRTTWWGKTRGGWMGTMG 486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              847 KARYWWKWATWCATKRWMTKGKGAKWAWTWMAKAWRKYYWSWMRAWYYYYKTRTRYKTC 906
                                                                                     2 2
                                                                                                                                                                                                                                                                                                                                                           CGATACAGACTTGGAAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGTA 121
                                                                                                                                                                                                                                                                                                                                                                                                      ACAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGCAGTGACCTTTGAGAGTACATCTC 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      242 TAGAGTGGTATGTGTAGAGCCAGATTTTCAGCATCAGAACCATCAAGCATTTTGGGGGTG 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         667 WMYYMSKYTYAKYGSYWRYRAHCMYMWRWYYYRYRSYMTYMAWYTSSTRWAMTGMKYS 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    422 TCCTTTACAACAGAAATAACAGATTTCCCAGCCTCTAACCAAGAAACAACAAGTTTGGG 481
                                                                                                                                                                                                                                                                                                                                               61
                                                                                   Identifying at least one gene involved in plant resistance or response pathogenic infection for conferring resistance or tolerance to a plant bacterial, fungal or viral infection by determining or detecting plant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GRYWTSWYKYCKCSWKYRSMWYYWSWWWAKTWKOWWRRYATRAMWWYRYSMKWYTWCTMW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           602 TAAAAAGGAAGTTATTTCAATAAAATGACCCCTTGGAAGGAGTTCAAAACAGGTTGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                   TAAACTGGGAAGAGGACAGAGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAGGAAAAAGGAGCCATGAATCAAAAGGTGGGGAAAAGGCCTTTTGGGAAGGCAGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               482 AACATTCCTCTCTCTGAAATATGAAAGAGGGGGTAAATACTGGAGTAGGATTGTGAA
                                                                                                                                                                                                                                                                                                                                               2 AAAATATCTGATAGGCAGTTAGAAATTTGAGTTTGGAACACAGGAGAGAGGGCTTTGATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAGTCAAGAGAAAAAAAAAAGACCCCAAGTGTAACAGATACTTCTCCCATGGGATGG
                                                                                                                                                                                                                                                                                                                          Gaps
                                          ö
                                                                                                                                                                                                                                                                                                                          ;
0
                               Zou Z
                                                                                                                                                                                                                                                                                Sequence 2000 BP; 336 A; 265 C; 284 G; 363 T; 0 U; 752 Other;
                                                                                                                                                                                                                                                                                                     Length 2000;
                                Hon
                                       Τ,
                                                                                                                                                                                                                                                                                                              L Similarity 9.9%; Pred. No. 0.11;
69; Conservative 292; Mismatches 334; Indels
                               SA,
Zhu
                               Goff.
e Z,
                                                                                                                                                                                                                                                                                                     Score 43.8; DB 7;
                               Glazebrook J, G
Whitham S, Xie
                                                                                                                                       Claim 27; SEQ ID NO 5263; 899pp; English
           SYNGENTA PARTICIPATIONS AG.
                                m ×
                               Cooper I
                                                                                                                                                                                                                                                          illustrate the invention.
                               Chen W, Co
                                                               WPI; 2003-175290/17
                                                                                                                   gene expression.
                                          ъ,
                              Chang H,
Katagiri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   787
                                                                                                                                                                                                                                                                                                                                                                                                              367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           362
                                                                                                                                                                                                                                                                                                                                                                    307
                                                                                                                                                                                                                                                                                                                                                                                         62
                                                                                                                                                                                                                                                                                                                                                                                                                                                       427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         727
                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                               Local
          (SYGN)
                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
셤
                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                            \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

ð

```
ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           109
Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human cervical epithelial cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAATGTGAAGTTTGCAGTTGAATATTTGTGCCTGGAACTTAGGAAAAACAATGTGTGGGGC 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to human single exon nucleic acid probes (SENP). The present sequence is one such probe. The SENPs are derived from human Hela cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Probe #13000 for gene expression analysis in human cervical cell sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           168 carcigcararcegreargaargaagccacagaagccagaagcaarcaargcagcaagr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 AAATATCTGATAGGCAGTTAGAAATTTGAGTTTGGAACACAGGAGAGAGGCTTTGATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Probe; human; microarray; gene expression; cervical epithelial cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 41.8; DB 4; Length 3 Pred. No. 0.19; 0; Mismatches 102; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 300 BP; 68 A; 87 C; 37 G; 108 T; 0 U; 0 Other;
                                                                                                                            967 WAMYSYSWIRIYWMRIWRWWWASSRIAKRWARMWW 1001
                                                                                             ATGCTTTATGTGGAGTTTTGAAAATATATAAAAT 696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 25; SEQ ID NO 13000; 487pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rank
                                                                                                                                                                                                                                                                                                  ВР.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-023559P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-FEB-2000; 2000US-0180312P.
26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-00608408.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JAN-2001; 2001WO-US000670
                                                                                                                                                                                                                                                                      067/c
AAI23067 standard; DNA; 300
                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 52.5
Matches 115, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-488901/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cervical cancer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200157278-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                  12-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-AUG-2001
```

S

49

us-10-051-835-14.rng

```
Human genome-derived single exon nucleic acid probes useful for analyzing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 ATAAACTGGGAAGGAGGACAGGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                108 hahthangtgahghgahghgahgangaghaghgahgahggahgcchatgtthangg 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to single exon nucleic acid probes (SENP). The present sequence is one such probe. The probes are useful for prodicting a microarray for predicting, measuring and displaying gene expression in samples derived from human placenta. The probes are useful for antenatal diagnosis of human genetic disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   63 GA--TACAGACTTGGAAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  228 AAAIGIGAAGITIGCAGIIGAAIAITITGIGCCIGGAACIIAGGAAAAAAAAAGIGGGC
Probe #17059 used to measure gene expression in human placenta sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 AAATATCTGATAGGCAGTTAGAAATTTGAGTTTGGAACACAGGAGAGAGGCTTTGATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6.0%; Score 41.8; DB 4; Length 3 52.5%; Pred. No. 0.19; vative 0; Mismatches 102; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                  Probe, microarray, human; placenta; antenatal diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 300 BP; 68 A; 87 C; 37 G; 108 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    219
                                                 AACAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGCA 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACAAGAGTATGAACAAGAGTGAGGAGATTATTAGCA
                                                                                             AATGATAGTGTATTCAAAATTGGCAAAAGAGACTGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 25; SEQ ID NO 17059; 654pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene expression in human placenta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MOLE-) MOLECULAR DYNAMICS INC.
                                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-YAY-2000; 2000US-0207456F.
30-UUN-2000; 2000US-0060B408.
03-AUG-2000; 2000US-00633566.
21-SEP-2000; 2000US-0234687F.
27-SEP-2000; 2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001; 2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-OCT-2000; 2000GB-00024263
                                                                                                                                                                                                                     AAI48373 standard; DNA; 300
                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                          genetic disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-488897/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200157272-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Simil
Matches 115; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                     17-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                   181
                                                                                                48
                                                                                                                                                                                                                                                                      AA148373;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Penn SG,
                                                                                                                                                                      RESULT 6

A4148373.

A4148373.

A4148373.

A714 A4148373.

A72 A414.

DIT 17-09

DIT 17-09

DIT 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-09

END 17-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원 상
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
  셤
                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The present sequence is a single exon nucleic acid probe of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63 GA--TACAGACTTGGAAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 ATAAACTGGGAAGGACGACAGAACAGGACTCAAGGAACATATTTAAGGACTGGGTAGAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human fetal liver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     228 AAATGTGAAGTTTGCAGTTGAATATTTGTGCCTGGAACTTAGGAAAACAATGTGTGGGC 169
       121 ATAAACTGGGAAGAGGACAGAGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        168 CATCTGCATATCGGTGATGAATGAAGCCACAGAAGCAGAAAGCAATGCAATGCAGCAAGAGT
                                                 Human; foetal liver; gene expression; single exon nucleic acid probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAATATCTGATAGGCAGTTAGAAATTTGAGTTTGGAACACACAGGAGAGAGGCTTTGATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 41.8; DB 4; Length 300;
Pred. No. 0.19;
0; Mismatches 102; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 4; SEQ ID NO 16466; 639pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                  Human foetal liver single exon nucleic acid probe #16466.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 300 BP; 68 A; 87 C; 37 G; 108 T; 0 U; 0 Other;
                                                                                                  219
                                                                                                                                              AATGATAGTGTATTCAAAATTGGCAAAAGAGACTGAGAA 10
                                                                                                  181 AACAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-FEB-2000; 2000US-0180312P.

20-MAY-2000; 2000US-0270456P.

30-JUN-2000; 2000US-00608408

03-AUG-2000; 2000US-00632366.

21-SEP-2000; 2000US-023468PP.

27-SEP-2000; 2000US-023468PP.

04-OCT-2000; 2000US-023459P.
                                                                                                                                                                                                                                                                         ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JAN-2001; 2001WO-US000669
                                                                                                                                                                                                                                                                      ABA68161 standard; DNA; 300
                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 52.5
Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-483447/52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200157277-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                    01-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-AUG-2001
                                                                                                                                                 48
                                                                                                                                                                                                                                                                                                                     ABA68161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Penn SG,
                                                                                                                                                                                                                                                 ABA68161
                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                            g
                                            g
                                                                                                  ઠે
```

169 120 109

62

Gaps

7

us-10-051-835-14.rng

63 GA--TACAGACTTGGAAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGT 120

48 AATGATAGTGTATTCAAAATTGGCAAAAGAGACTGAGAA 10

a

```
The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human breast and BT 474 cells. The method involves contacting the probes with a collection of detectably labelled nucleic acids derived from mRNA of human breast, and then measuring the label bound to each probes of the microarray. The probes are useful for verifying the expression of regions of genomic DNA predicted to encode proteins. They are useful for gene discovery, and for determining predisposition and/or prognosing breast disease. Gene expression analysis is useful for assessing the toxicity of chemical agents on cells. The microarray of this invention presents a far greater diversity of probes for measuring microarrays. The method is suitable for rapid production of functional information from genomic sequence. The present sequence is a single exon nucleic acid probe of the invention. Note: The sequence data for this parted did not form part of the printed specification, but was obtained to the invention of the directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        useful
                                                                                                                                                                                        Human; microarray; single exon probe; gene expression; breast; disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New spatially-addressable set of single exon nucleic acid probes, for measuring gene expression in sample derived from human breast, comprises number of single exon nucleic acid probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 41.8; DB 4; Length 300;
Pred. No. 0.19;
0; Mismatches 102; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 4; SEQ ID NO 8914; 327pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 300 BP; 68 A; 87 C; 37 G; 108 T; 0 U; 0 Other;
                                                                                                                                                   Human breast cell single exon nucleic acid probe #8914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rank
                         219/c
ABA50219 standard; DNA; 300 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                              03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-024687P.
27-SEP-2000; 2000US-023659P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                             26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-00632366.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6.0%;
                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001; 2001WO-US000662
                                                                                                                                                                                                                                                                                                                                                                                             2000US-0180312P
                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 52.5
Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Penn SG, Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-496933/54.
                                                                                                                                                                                                                                                                               WO200157271-A2.
                                                                                                                                                                                                                                                                                                                                                                                         04-FEB-2000;
26-MAY-2000;
                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                01-FEB-2002
                                                                                                                                                                                                                                                                                                                    09-AUG-2001
                                                                          ABA50219
                                                                                                                                                                                                          cancer;
RESULT 7
ABA50219/
```

AAATGTGAAGTTTGCAGTTGAATATTTGTGCCTGGAACTTAGGAAAAACAATGTGTGGGC 169

AAATATCTGATAGGCAGTTAGAAATTTGAGTTTGGAACACAGGAGAGAGGCCTTTGATGGC

ო

ઠ 요

Best Loca Matches

62

Gaps

5

```
121 ATAAACTGGGAAGAGACAGAGGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAA 180
                                                                                                                                                                                                                                                                                                             Human; brain expressed exon; gene expression analysis; probe; microarray; Alzheimer's disease; multiple sclerosis; schizophrenia; epilepsy; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GA -- TACAGACTTGGAAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGT 120
                                                          probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is one of the probes of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Single exon nucleic acid probes for analyzing gene expression in human
 168 carciecararcegreargaargaagecacagaageagaageaarcaargeageagagr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 AAATATCTGATAGGCAGTTAGAAATTTGAGTTTGGAACACACAGGAGAGGCTTTGATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention provides a number of single exon nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 4; SEQ ID NO 16532; 650pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match 6.0%; Score 41.8; DB 4; Length 300; Local Similarity 52.5%; Pred. No. 0.19; les 115; Conservative 0; Mismatches 102; Indels
                                                                                                                                                                                                                                                                                  Human brain expressed single exon probe SEQ ID NO: 16532.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seguence 300 BP; 68 A; 87 C; 37 G; 108 T; 0 U; 0 Other;
                                                                                       181 PACAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGCA 219
                                                                                                                    AATGATAGTGTATTCAAAATTGGCAAAAGAGACTGAGAA 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rank
                                                                                                                                                              RESULT 8
AAK16541/c
ID AAK16541 standard; DNA; 300 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-0207456P.
2000US-02068408.
2000US-0234687P.
2000US-0234687P.
2000US-02363787P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001; 2001WO-US000667
                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-483446/52
                                                                                                                                                                                                                                                                                                                                                                                                   WO200157275-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-SEP-2000;
27-SEP-2000;
24-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-FEB-2000;
                                                                                                                                                                                                                                                    05-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                 09-AUG-2001
                                                                                                                                                                                                                        AAK16541;
                                                                                                                     48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               brains.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                        Homo
В
                                                     셤
                                                                                                                  엄
                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                               ઠ
                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

```
The invention relates to a single exon nucleic acid probe (SENP) (I) for measuring human gene expression in a sample derived from human adult liver. comprising one of 13109 defined nucleotide sequences given in the specification (or complements/ fragments). The probe hybridises at high stringency to a nucleic acid molecule expressed in the human adult liver. (I) may be used for predicting, measuring and displaying gene expression in samples derived from human adult liver. The genes identified may be involved in genetic liver diseases such as cirrhosis, hyperlipoproteinaemia, hyperlipidaemia and hypercholesterolaemia which is associated with coronary heart disease. ABS25011-ABS51005 represent human liver single exon nucleic acid probes of the invention. Note: The sequence information for this patent does not appear in the printed specification but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human adult liver.
ATABACTGGGAAGAGGACAGAGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAA 180
                                                                                    Human; single exon nucleic acid probe; liver; cirrhosis;
hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
coronary heart disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 300 BP; 68 A; 87 C; 37 G; 108 T; 0 U; 0 Other;
                                                                                                                       181 AACAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGCA 219
                                                                                                                                                        AATGATAGTGTATTCAAAATTGGCAAAAGAGACTGAGAA 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 41.8; DB 4;
Pred. No. 0.19;
                                                                                                                                                                                                                                                                                                                                               Human liver single exon probe, SEQ ID No 16893.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; SEQ ID NO 16893; 658pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chen W, Rank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                               903/c
ABS41903 standard; DNA; 300 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-0224687P.
7-SEP-2000; 2000US-035359P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-FEB-2000; 2000US-0180312P.
26-MAY-2000; 2000US-0207456P.
30-JUN-2000; 2000US-00608408.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 52.5%;
Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-JAN-2001; 2001WO-US000664
                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Penn SG, Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-488898/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200157273-A2.
                                                                                                                                                                                                                                                                                                                25~FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-AUG-2001
                                                                                                                                                                                                                                                                               ABS41903;
                                                     121
                                                                                                                                                          48
                                                                                                                                                                                                                            RESULT
                                                                                  셤
                                                                                                                       8
                                                 ઠે
```

```
The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human lung comprising single exon nucleic acid probes having one of 12614 nucleic acid sequences mentioned in the specification, or their complements or the 12387 open reading frames derived from the 12614 probes. Also included are a microarray comprising the novel set of probes which hybridise at high stringency to a nucleic acid expressed in the human lung; measuring gene expression in a sample
                                                                                                109
                                                                                                                                 121 ATAAACTGGGAAGAGGACAGAGGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAA 180
                                                                                                                                                                  Human, ds; single exon probe; asthma; lung cancer; CODD; ILD; chronic obstructive pulmonary disease; interstitial lung disease; familial idiopathic pulmonary fibrosis; neurofibromatosis; tuberous sclerosis; Gaucher's disease; Niemann-Pick disease; Hermansky-Pudlak syndrome; Barcoidosis; pulmonary haemosiderosis; pulmonary histiocytosis; lymphangioleiomyomicsis; Karagener syndrome; pulmonary histiocytosis; lymphangioleiomyomicsis; Karagener syndrome; pulmonary disease; liparesis; fibrocystic pulmonary dyskinesis; pulmonary hypertension; hysplasia; hyaline membrane disease; open reading frame; ORF.
                           63 GA--TACAGACTTGGAAGACATCAGTGCTGAGCAGTAAATGAGATGCATTCAGGAAAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                          Human genome-derived single exon probe ORF from lung SEQ ID No 16340.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Spatially-addressable set of single exon nucleic acid probes, used
                                                                                                                                                                                                      181 AACAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGCA 219
                                                                                                                                                                                                                                     48 AATGATAGTGTATTCAAAATTGGCAAAAGAGACTGAGAA 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   measure gene expression in human lung samples.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 4; SEQ ID NO 16340; 634pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-FEB-2000; 2000US-0180312P.
26-MAY-2000; 2000US-0207456P.
30-UTN-2000; 2000US-0568408.
03-MUG-2000; 2000US-05632366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-023459P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2001; 2001WO-US000665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000GB-00024263
                                                                                                                                                                                                                                                                                                                             ABS16349 standard; DNA; 300
                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Penn SG, Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-114183/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200186003-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                              19-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LS-NOV-2001.
                                                                                                                                                                                                                                                                                                                                                               ABS16349;
                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                     В
                                                                                                                                                                                                                                셤
                                g
                                                                     ઠે
                                                                                            g
                                                                                                                                                                                                      ઠે
```

ä

Gaps

5,

Indels

0; Mismatches

16-AUG-2001; 2001WO-US025840.

```
derived from human lung, comprising (a) contacting the array with a collection of detectably labeled nucleic acids derived from human lung mRNN, and (b) measuring the label detectably bound to each probe of the array; identifying exons in a eukaryotic genome, comprising (a) algorithmically predicting at least one exon from genomic sequences of the eukaryote; and (b) detecting specific hybridisation of detectably comprising a fragment identical to the predicted exon, the probe is included in the above mentioned microarray; assigning exons to a single exon probe, having a fragment identical to the predicted exon, the probe is included in the above mentioned microarray; assigning exons to a single exon comprising (a) identifying exons from genomic sequence by the method above and (b) measuring the expression of each of the exons in several tissues and/or cell types using hybridisation to a single exon microarrays having a probe with the exon, where a common pattern of expression of the exons in the tissues and/or cell types indicates that the exons should be assigned to a single gene; a peptide comprising one of 12011 sequences, mentioned in the specification, or encoded by the probes your and for identifying exons in a gene; particularly using human concluses of identifying exons in a gene; particularly using human clung derived mRNA and for the study of lung diseases such as asthma, lung derived mRNA and for the study of lung diseases such as asthma, lung disease (LLD), familial idiopathic pulmonary fibrosis; neurofibromatosis, tuberous sclerosis, Jumphangioleionyomtosis, pulmonary disease, pulmonary alveolar proteinosis, cluberous, sarcoidesis, pulmonary disease, pulmonary disease. The prise of the squence is a single exon probe open reading frame of the prinary pertined specification, brown the print pattern of invention. Note: The sequence date for this patent did not form part of the printed specification, brown the printed specification, brown the printed specification, brown the printed specification, brow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          228 AAAicigaagirrgdagrigaarairrgigccriggaacrragaaaaaaaargrgrggg 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                63 GA--TACAGACTTGGAAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 ATAAACTGGGAAGGACAGAGGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 AAATATCTGATAGGCAGTTAGAAATTTGAGTTTGGAACACACAGGAGAGAGGCTTTGATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene mapping; tissue profiling; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 41.8; DB 6; Length 300;
Pred, No. 0.19;
0; Mismatches 102; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 300 BP; 68 A; 87 C; 37 G; 108 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGCA 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATGATAGTGTATTCAAAATTGGCAAAAGAGACTGAGAA 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human cancer related polynucleotide SEQ ID NO 4858.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; cytostatic; gene expression;
gene therapy; cancer; tumour; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABN64891 standard; cDNA; 451 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 52.5%;
Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
```

```
72 rercadecadentadarchardadricedadercadedecadaderchedecreadarana 131
                                                                                                                                                                                                                                                 The invention relates to an isolated polynucleotide (ABN27253-ABN33262) with cytostatic activity. The polynucleotide is used to produce a polypeptide, to detect differentially expressed genes correlated with cancerous state of a mammalian cell and to inhibit tumour growth. The polynucleotide is used as a probe in mapping and tissue profiling. The encoded polypeptide and antibodies to the polypeptide can also be used for therapput once; The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tobacco, plant, fungicide, pesticide, antifungal protein, Phytophthora;
transgenic plant, crop improvement, ds.
                                                                                                                                                               New nucleic acid for producing a polypeptide, detecting differentially expressed genes correlated with a cancerous state of a mammalian cell, and inhibiting tumor growth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10 TGATAGGCAGTTAGAATTTGAGTTTGGAACACAGGAGAGAGGCCTTTGATGGCGATACAG
                                                                                            Randazzo F;
                                                                                            Reinhard C, Ra
ot D, Labat I;
                                                                                                                                                                                                                          Claim 1; SEQ ID NO 4858; 883pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                        5.9%; Score 41; DB 6; Length 451;
larity 61.9%; Pred. No. 0.37;
Conservative 0; Mismatches 40; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          70 ACTIGGAAGACATCAGIGCTGAGCAGTAAATGAGATGATTCAGGA 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       132 Arriccaacrcarcacacacacacarcararraaaccrccaaca 176
                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 451 BP; 129 A; 104 C; 106 G; 112 T; 0 U; 0 Other;
                                                                                 Sudduth-Klinger J, Reinna
Sudduth-Klinger J, Reinna
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tobacco leaf antifungal protein genomic DNA.
                                                                                                          Zhang G, Kassam A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
774. .5743
/*tag=__r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AA096127 standard; DNA; 6305 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag= j
3105. .2104
                        16-AUG-2000; 2000US-0226326P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .1154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (*tag= p
12. .1044
'*tag= i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          '*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ag= r
                                                                                             Garcia PD,
                                                                                 Escobedo J, Garcan
                                                                                                                                     WPI; 2002-241905/29.
                                                    (CHIR ) CHIRON CORP.
(HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nicotiana tabacum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ96127;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     intron
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              intron
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 12
AAQ96127/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ехоп
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

ô

```
ABL33696 standard; DNA; 6668 BP
                                                                                                                                                                                                                            WO200200928-A2.
                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                    03-JAN-2002.
                                                     26-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                           methylation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Sim
Matches 100;
                               ABL33696;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
4BL33696,
             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3093 rrccaagargrcaarrraaarcrrraaaraggraarrcagaaaararrgraararagra 3034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3033 gaagggcarrgarrancraararraarahirraaragarrgaggrcagaaaraar 2974
                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antifungal protein and DNA obtd. from plants - used for producing transgenic plants or in antifungal compsns., partic. for retarding growth of Phytophthora infestans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This DNA sequence may be expressed a part of a chimeric DNA which is either expressed in a host cell or transgenic plant using binary vector plasmid pMOG846, or a replicon, preferably pMOG841. The resulting expressed protein displays fungicidal activity against Phytophthora infestans. The DNA may be expressed in a tissue- specific manner, especially in the style and stigma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                72 ITGGAAGACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGTATAAACTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             132 AGAGGACAGAGACAGGCTCAAGGAACATATTTAAGGACTGGGTAGAAAAACAAGAGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                           Troost JPE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 6305 BP; 1905 A; 1094 C; 1114 G; 2192 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5.9%; Score 40.8; DB 2; Length 6305; 54.7%; Pred. No. 1.1; cive 0; Mismatches 67; Indels 0.
                                                                                                                                                                                                                                                                                                                                                                                         Kroonswart S, Van Deventer- T.
Logemann J, Sela-Buurlage MB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 27; 58pp; English
                                                                                                                                                                       /*tag= g
5415. .5530
/*tag= o
5531. .5743
/*tag= h
/*tag= q
/label= putative
                                                                                               ,11 .5253
/*tag= f
5254. .5335
/*tag= n
5336.
             /*tag= d
4329.
                                  /*rag= 1
4432. /**
                                                          /*tag= e
4778. ...
                                                                                                                                                                                                                                                                                                                        95WO-EP000488.
                                                                                                                                                                                                                                                                                                                                               94EP-00200321.
                                                                         e, '8. .4890
/*tag= m
4891.
                                                                                                                                            /*tag= g
5415.
5415.
5415.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 5%...
Best Match
Best Local Similarity
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                           Melchers LS, Ponstein AS,
Ohl SA, Bres-Vloemans AA,
                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1995-293130/38.
P-PSDB; AAR78679.
                                                                                                                                                                                                                                                                                                                                                                    INT NV
                                                                                                                                                                                                                                                                                                                                                                     (MOGE-) MOGEN
                                                                                                                                                                                                                                                                            WO9521929-A1
                                                                                                                                                                                                                                                                                                                         09-FEB-1995;
                                                                                                                                                                                                                                                                                                                                               09-FEB-1994;
                                                                                                                                                                                                                                polyA_signal
                                                                                                                                                                                                                                                                                                   17-AUG-1995
                                             intron
                                                                                          intron
                                                                                                                                       intron
                                                                                                                                                                                   intron
                                                                                                                 exon
                        exon
                                                                    exon
                                                                                                                                                              exon
                                                                                                                                                                                                           exon
```

엄

ò

ઠે 원 ठे

```
5429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention provides a number of human immune system associated genes which are modified by the methylation of cytosines. The sequences can be used in the diagnosis and treatment of immune system disorders, including eye diseases such as retinopathy, neovascular glaucoma and macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid trakaemia, Alzheimer's disease, Alzheimer's disease, Alzheimer's disease, and inflammatory(ulcerative bowel diseases. The present sequence is a gene of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             428 ACAACAGAAATAACAGATTTCCCAGCCTCTAACCAAGAAACAACAAGTTTGGGAACATT 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               607
                                                                                                                                                         antiarteriosclerotic; antianaemic; cytostatic; nootropic;
neuroprotective; anti-HIV; anticonvulsant; ophthalmological;
antizheumatic; antiarthritic; antidiabetic; antipsoriatic;
antiinflammatory; cancer; labelines; antionalerosis; anaemia;
acute myeloid leukaemia; Alzheimer's disease; AIDS; epilepsy;
neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            548 CAAGAGAAAAAAAAAGAACAGCCCAAGTGTAACAGATACTTCTCCATGGGATGGTAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nucleic acid comprising fragment of chemically modified gene, useful i
diagnosis and treatment of diseases associated with abnormal cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              488 CCTCTCTTCTGAAATATGAAAGAGAGAGGATAAATACTGGAGTAGGATTGTGAAAAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                          system disease; cytosine methylation; antiasthmatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 6668 BP; 1628 A; 328 C; 1974 G; 2737 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            h
Similarity 50.3%; Score 40.6; DB 6; Length 6668;
00; Conservative 0; Mismatches 99; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 1669; 32pp + Sequence Listing; German.
                                                           Human immune system associated gene SEQ ID NO: 1669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5308 CAAAACTITCTAAAAAAA 5290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        608 GGAAGTTATTTCAATAAAA 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-JUL-2001; 2001WO-EP007537.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JUN-2000; 2000DE-01032529.
01-SEP-2000; 2000DE-01043826.
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-130909/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

Sequence 1269 BP; 498 A; 116 C; 217 G; 438 T; 0 U; 0 Other;

```
the nucleic acid inhibits proliferation in the specification where expression of the nucleic acid inhibits proliferation of a cell. Also included are:

(1) a vector comprising a promoter operably linked to the nucleic acid controlled are:

(2) a vector comprising a promoter operably linked to the nucleic acid, (2) a host cell containing the vector;

(3) an isolated condition of the antisense nucleic acid; (4) an antibody capable of specifically binding the polypeptide or its fragment whose expression is inhibited by the antisense nucleic acid; (4) an antibody capable of specifically binding the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular control proliferation or the activity of agene in an operon required for proliferation, (7) identifying a compound that influences the activity of required for cellular proliferation or the biological pathway in which a proliferation-required gene or its gene product lies or a gene on which the test compound that inhibits proliferation of an organism acts; (9) manufacturing an antibiotic; (10) profiling a compound's activity; (11) a culture comprising strains in which the gene or which has a proliferation antibiotic; (10) profiling a compound's activity; (11) a culture comprising strains in which the gene or which each of the strains is present in a culture or collection of proliferation of an organism. The antisense nucleic acids are useful for the strains; or (13) identifying the target of a compound that inhibits the collection of a proliferation to isolate candidate molecules for rational correspondence or successing or successing the action of an organism. The antisense nucleic acids are useful for conjieration or a solate candidate molecules for rational correspondence and prove the succession of an organism or solate candidate molecules for rational correspondence and prove and prove and prove the printed specification, but was obtained in cells are electronic format directly from WIRO at the printed specification or electronic format directly fro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense nucleic acids, useful for identifying proteins or screening for homologous nucleic acids required for cellular proliferation to isolate candidate molecules for rational drug discovery programs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to an isolated nucleic acid comprising any one of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zyskind JW;
Xu HH;
                                                                                                                                                                                                                      ds; prokaryotic essential gene; cell proliferation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ohlsen KL,
Forsyth RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Haselbeck R,
Yamamoto R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           claim 14; SEQ ID NO 16543; 1766pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                            Prokaryotic essential gene #10330
                                            ACA28673 standard; DNA; 1269 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Malone C,
Carr GJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-MAR-2001; 2001US-00815242.
06-SEP-2001; 2001US-00948993.
25-OCT-2001; 2001US-0342923P.
08-FEB-2002; 2002US-00072851.
06-MAR-2002; 2002US-0362699P.
                                                                                                                                                                                                                                                                                                                                                                                                                   21-MAR-2002; 2002WO-US009107
                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ELIT-) ELITRA PHARM INC.
                                                                                                                                                                                                                                                                                     Clostridium botulinum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zamudio C,
Trawick JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-029926/02
                                                                                                                                                                                                                                             drug design; gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P-PSDB; ABU24803
                                                                                                                                                                                                                                                                                                                               WO200277183-A2
                                                                                                                                  19-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                         03-OCT-2002
                                                                                                                                                                                                                      Antisense;
                                                                                      ACA28673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wang L,
Wall D,
RESULT 14
ACA28673
```

```
459
                                                                                                                                                                                                                                                                                             198
                                                                                                                                                                                            79 ACATCAGTGCTGAGCAGTAAATGAGATGATTCAGGAAAGAGTATAAACTGGGAAGAGGAC 138
                                                                                                                                                                                                                                                                                                                                                                                              AGAGTGAGGAGATTATTAGCAGTGACCTTTGAGAGTACATCTCTAGAGTGGTATGTGTAAG 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          259 AGCCAGATTTTCAGCATCAGAACCATCAAGCATTTTGGGGGTGGAAAGGAAAAGGAGAGAT 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human, nootropic, neuroprotective, cytostatic, dermatological, virucide, immunosuppressive, antiinflammatory, anti-HIV; antibacterial; vulnerary, antiparkinsonian; antisickling; antianaemic; antiarthritic; cancer; antirheumatic, hepatotropic, cerebroprotective, antiinflammatory; antiallergic, antidiabetic, antiulcer; anticonvulsant, antifungal, antiparastic, cardiant; immune disorder; cardiovascular disorder; neurological disease; infection; nephrotropic; gene therapy; vaccine; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                     577 AGATTTATAAATATAGAGGCCTTAAGTTTTCAATGGATGTGCCAAGGGAGGAGATGGAAG
                                                                                                GTTAGAAATTTGGAACACACAGAGAGAGAGGCTTTGATGGCGATACAGAAG
                                                                                                                                             ecittaaatatagectataaacattcaaetegagactittatagecgiatateagecagat
                                                                                                                                                                                                                                           460 AATACTCCAGATAAAATGCATTAAAATATCTTATGAAAACTATAATTGAGGACGAAGGT
                                                                                                                                                                                                                                                                                          520 TTAGGAGCAGTTATAGGAA---AGTTTAGAACTAGAAATAAAGACAGAAATAAGA
                                                 .
ო
Length 1269;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human nervous system related polynucleotide SEQ ID NO 9486.
                               Pred. No. 0.91;
0; Mismatches 163; Indels
2; DB 7;
0.91;
Score 40.2;
Pred. No. 0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABA17155/C
XX
ABA17155 Standard; DNA; 32249 BP.
XX
ABA17155;
XX
ABA17155;
XX
ABA17155 Standard; DNA; 32249 BP.
XX
DT 23-JAN-2002 (first entry)
XX
Human, nootropic; neuroprotective;
XW
immunosuppressive; antinflammatory
XM
antialparkinsonian; antisickling; antiantiantianteric; antinflammatory
XX
Antiallargic; antidiabetic; arthulc
XX
XX
Homo sapiens.
XX
Homo sapiens.
XX
16-AUG-2001.
XX
XX
17-JAN-2001, 2001W0-US001334.
XX
XX
17-JAN-2000, 2000US-019065P.
PR
24-FEB-2000; 2000US-018062BP.
PR
24-FEB-2000; 2000US-0180635P.
PR
31-JAN-2000; 2000US-0180835P.
PR
17-MAR-2000; 2000US-0180835P.
PR
17-MAR-2000; 2000US-0180835P.
PR
17-MAR-2000; 2000US-018081P.
PR
17-MAR-2000; 2000US-018081P.
PR
17-MAR-2000; 2000US-0205515P.
PR
17-MAR-2000; 2000US-0205515P.
PR
17-MAR-2000; 2000US-0205515P.
PR
17-MAR-2000; 2000US-0205515P.
PR
17-MAR-2000; 2000US-021588P.
PR
11-UUL-2000; 2000US-02148PP.
PR
11-UUL-2000; 2000US-02148PP.
PR
11-UUL-2000; 2000US-02148PP.
PR
11-UUL-2000; 2000US-02148PP.
PR
11-UUL-2000; 2000US-02148PP.
PR
11-UUL-2000; 2000US-02148PP.
PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           319 GAATCAAAAGGTGGGGA 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          697 dágrigáardáardáda 713
     5.8%;
                                               151; Conservative
                            Similarity
                                                                                                                                                                                                                                                                                                  139
                                                                                                                                                                                                                                                                                                                                                                                                   199
                                                                                                                                                     400
     Query Match
Best Local
                               Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 15
                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
```

```
12-SEP-2000; 2000US-0232081P.
14-SEP-2000; 2000US-0232398P.
14-SEP-2000; 2000US-0232398P.
14-SEP-2000; 2000US-0232398P.
14-SEP-2000; 2000US-0232398P.
14-SEP-2000; 2000US-0233063P.
14-SEP-2000; 2000US-0233064P.
14-SEP-2000; 2000US-0233064P.
14-SEP-2000; 2000US-0233064P.
14-SEP-2000; 2000US-0233064P.
15-SEP-2000; 2000US-023402P.
25-SEP-2000; 2000US-023402P.
25-SEP-2000; 2000US-023404P.
27-SEP-2000; 2000US-023404P.
27-SEP-2000; 2000US-023636P.
29-SEP-2000; 2000US-023636P.
29-SEP-2000; 2000US-023636P.
29-SEP-2000; 2000US-023636P.
29-SEP-2000; 2000US-023636P.
29-SEP-2000; 2000US-023636P.
29-SEP-2000; 2000US-023636P.
29-SEP-2000; 2000US-023636P.
29-SEP-2000; 2000US-023636P.
29-SEP-2000; 2000US-023636P.
29-SEP-2000; 2000US-023636P.
29-SEP-2000; 2000US-023636P.
29-CCT-2000; 2000US-0239338P.
20-CCT-2000; 2000US-0239338P.
20-CCT-2000; 2000US-0239338P.
20-CCT-2000; 2000US-0239338P.
20-CCT-2000; 2000US-0239333P.
14-JUL-2000; 2000US-0218290P.
26-JUL-2000; 2000US-0220963P.
26-JUL-2000; 2000US-022451BP.
14-AUG-2000; 2000US-022451BP.
14-AUG-2000; 2000US-022513P.
14-AUG-2000; 2000US-0225213P.
14-AUG-2000; 2000US-022526BP.
14-AUG-2000; 2000US-022526BP.
14-AUG-2000; 2000US-022526BP.
14-AUG-2000; 2000US-022526BP.
14-AUG-2000; 2000US-022526BP.
14-AUG-2000; 2000US-022575PP.
14-AUG-2000; 2000US-022575PP.
14-AUG-2000; 2000US-022575PP.
14-AUG-2000; 2000US-022575PP.
14-AUG-2000; 2000US-022575PP.
14-AUG-2000; 2000US-022575PP.
12-AUG-2000; 2000US-022575PP.
13-AUG-2000; 2000US-022575PP.
14-AUG-2000; 2000US-022575PP.
15-AUG-2000; 2000US-022575PP.
16-AUG-2000; 2000US-022575PP.
16-AUG-2000; 2000US-022576PP.
16-AUG-2000; 2000US-022576PP.
16-AUG-2000; 2000US-022576PP.
16-AUG-2000; 2000US-02258PP.
16-AUG-2000; 2000US-02298PP.
16-AUG-2000; 2000US-02298PP.
16-AUG-2000; 2000US-02298PP.
                                                                                                                                                                                                                                                                                                                                   2000US-0229344P.
2000US-0229345P.
2000US-0229509P.
                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0231242P.
2000US-0231243P.
2000US-0231244P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0231413P.
2000US-0231414P.
2000US-0232080P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0240960P.
2000US-0241785P.
                                                                                                                                                                                                                                                                                                                                                                             2000US-0229513P
2000US-0230437P
2000US-0230438P
                                                                                                                                                                                                                                                                                                                                                                                                                    08-SEP-2000; 2
08-SEP-2000; 2
08-SEP-2000; 2
08-SEP-2000; 2
08-SEP-2000; 2
                                                                                                                                                                                                                                                                                                                                                                             05-SEP-2000; 206-SEP-2000; 206-SEP-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-OCT-2000;
20-OCT-2000;
01-NOV-2000;
                                                                                                                                                                                                                                                                                                                                   01-SEP-2000;
01-SEP-2000;
05-SEP-2000;
```

08-NOV-2000; 2000US-0246474P.
08-NOV-2000; 2000US-0246475P.
08-NOV-2000; 2000US-0246477P.
08-NOV-2000; 2000US-0246477P.
08-NOV-2000; 2000US-0246473P.
08-NOV-2000; 2000US-0246524P.
08-NOV-2000; 2000US-0246524P.
08-NOV-2000; 2000US-0246528P.
08-NOV-2000; 2000US-0246528P.
08-NOV-2000; 2000US-0246528P.
08-NOV-2000; 2000US-0246528P.
08-NOV-2000; 2000US-0246520P.
08-NOV-2000; 2000US-024651P.
08-NOV-2000; 2000US-024661P.
08-NOV-2000; 2000US-024661P.
08-NOV-2000; 2000US-024661P.
08-NOV-2000; 2000US-024661P.
08-NOV-2000; 2000US-024920P.
17-NOV-2000; 2000US-024921P.
17-NOV-2000; 2000US-024921P.
17-NOV-2000; 2000US-024921P.
17-NOV-2000; 2000US-024921P.
17-NOV-2000; 2000US-024921P.
17-NOV-2000; 2000US-024921P.
17-NOV-2000; 2000US-024921P.
17-NOV-2000; 2000US-024921P. 2000US-0249216P. 2000US-0249217P. 2000US-0249244P. 2000US-0249244P. 2000US-0249264P. 2000US-0249264P. 2000US-0249264P. 2000US-0249264P. 2000US-0249300P. 2000US-0250391P. 2000US-0251030P. 2000US-0251030P. 2000US-0251988P. 2000US-0256719P. 2000US-0251868P. 2000US-0251869P. 2000US-0251989P. 2000US-0251990P. 2000US-0251479P 2001US-0259678P (HUMA-) HUMAN GENOME SCI INC 11-DEC-2000; 05-JAN-2001;

Rosen CA, Barash SC, Ruben SM;

WPI; 2001-541565/60.

Nucleic acids encoding 3224 human nervous system antigen polypeptides, useful for preventing, diagnosing and/or treating nervous system cancers and metastases.

Disclosure; SEQ ID NO 9486; 1701pp + Sequence Listing; English

The invention relates to novel genes (ABA11004-ABA21534) and proteins (ABB14678-ABB18001) useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. The genes are isolated from a range of human tissues disclosed in the specification. The nucleic acids, proteins, antibodies and (ant) agonists are useful in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and ovarian cancer and other cancers of the adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune disorders e.g. Addison's disease, allergies, autoimmune haemolytic ansembla, autoimmune thyroiditis, diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c) cardiovascular disorders such as myocardial ischaemias; (d) wound healing

```
43 AGGAGAGAGCTTTGATGGCGATACAGACTTGGAAGACATCAGTGCTGAGCAGTAAATGA 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          223 ACCTITGAGAGIACAICICIAGAGIGGIAIGIGIAGAGCCAGAITITC--AGCAICAGAA 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                281 CCATCAAGCATTTTGGGGGTGGAAAGGAAAGGAGCCATGAATCAAAAGGTGGGGAAAAGG 340
; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f) infectious diseases such as viral, bacterial, fungal and parasitic infections. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                            103 GATGATTCAGGAAAGAGTATAAACTGGGAAGAGGACAGAGGACAGGCTCAAGGAACATAT 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                163 TTAAGGACTGGGTAGAAAAACAAGAGAGTATGAACAAGAGTGAGGAGATTATTAGCAGTG
                                                                                                                                                                                                                           2; Gaps
                                                                                                                                   Sequence 32249 BP; 7365 A; 9042 C; 8692 G; 7150 T; 0 U; 0 Other;
                                                                                                                                                                         Query Match

5.7%; Score 39.8; DB 5; Length 32249;
Best Local Similarity 46.9%; Pred. No. 3.9;
Matches 158; Conservative 0; Mismatches 177; Indels 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20339 GAGTCCCTCAAGGGGAGCTGGAGCTCAGCATGAGGTC 20303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      341 CCTTTTGGGAGGTGGCAGTGTGGGTAGGGAGTAGGGC 377
888888
                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
```

Search completed: April 25, 2004, 08:45:59 Job time : 188.93 secs